

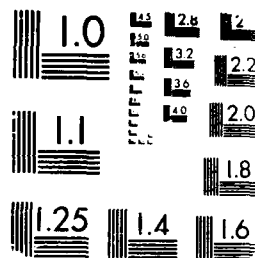
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KAZAN USSR LIMITED SURFACE OBSERVATIONS CLIMATIC  
SUMMARY (LISOC) PARTS A-F (U) AIR FORCE ENVIRONMENTAL  
TECHNICAL APPLICATIONS CENTER SCOTT AFB IL JUN 88  
USAFETAC/DS-88/027 F/G 0/2

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MICROCOPY RESOLUTION TEST CHART

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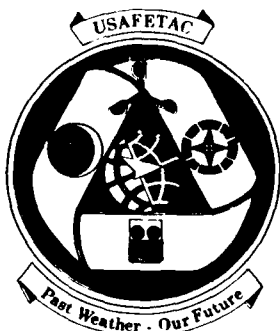
**OPERATING LOCATION - A**  
**USAFETAC**  
**Air Weather Service (MAC)**

**DTIC**  
**ELECTE**  
**JUL 07 1988**

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**"LIMITED SURFACE OBSERVATIONS"**  
**CLIMATIC SUMMARY "LISOCs"**

KAZAN USSR  
N 55 47

E 049 11 ELEV 210 FT

MSC #275950

PARTS A - F HOURS SUMMARIZED: SYNOPTIC HRS

PERIOD OF RECORD:  
HOURLY OBSERVATIONS: NOV 77 - OCT 87  
SUMMARY OF DAY DATA: NONE

JUN 22 1988

**FEDERAL BUILDING**

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**REPORT DOCUMENTATION PAGE**

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**6b. Office Symbol:**

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**7a. Name of Monitoring Organization:** USAFETAC

**7b. Address:** Scott AFB, IL 62225-5458

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**19 Abstract:** A statistical data summary of surface weather observation climatology: Kazan USSR. This summary is similar to the Revised Uniform Summary of Surface Weather Observations (RUSSWO), but is based on data collected from limited-duty weather observing stations; i.e., those that take weather observations less than 24 hours a day, 7 days a week. The summary is in five parts: PART 1, Weather Conditions and Atmospheric Phenomena; PART 2, Surface Winds; PART 3, Ceiling and Visibility; PART 4, Psychrometric Summaries; and PART 5, Pressure Summaries. Note that PART 2, Precipitation, is omitted. See USAFETAC/TN-83-001 (AD132186), An Aid For Using The Revised Uniform Summary of Surface Weather Observations (RUSSWO), for complete descriptions of contents and instructions for use.

**20 Distribution/Availability of Abstract:** Same as report.

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**22a Name of Responsible Individual:** Marianne L. Cavanaugh

**22b Telephone:** (618)256-2625.

**22c Office Symbol:** USAFETAC/LDD.

**DD FORM 1473 UNCLASSIFIED**

**REVIEW AND APPROVAL STATEMENT**

USAFETAC/DS-88/027 (LISOCs) KAZAN USSR Jun 1988 is approved for public release. There is no objection to unlimited *distribution of this document* to the public at large, or by the Defense Technical Information Center (DTIC) to the National Technical Information Service (NTIS).

This document has been reviewed and is approved for publication.

FOR THE COMMANDER

A handwritten signature in cursive script, appearing to read 'Walter S. Burgmann', followed by a horizontal line.

WALTER S. BURGMANN

Scientific and Technical Information Program Manager

LIMITED SURFACE OBSERVATIONS CLIMATIC SUMMARY

STATION NAME: KAZAN USSR

STATION NUMBER: 275551

SUMMARIZED HOURS: SYNOPSIS 3-HOURLY

PERIOD OF RECORD

HOURLY OBSERVATIONS: NOV 77 - OCT 87

SUMMARY OF DAY DATA (TEMPERATURES ONLY): DEC 58 - OCT 87 **DATA NOT AVAILABLE**

SUMMARY OF DAY DATA (PART TIME): NONE

TIME CONVERSION LST TO GMT: -3

DATE PRODUCED: 30 DEC 87

ALL USERS OF THIS LSOCS MUST FAMILIARIZE THEMSELVES WITH THE SITE'S DATA LIMITATIONS PRIOR TO USING OR DISTRIBUTING THESE SUMMARIES. A SPECIAL CAVEAT PAGE PROVIDES IMPORTANT INFORMATION FOR ALL USERS. THIS CAVEAT PAGE IS LOCATED IN FRONT OF THE SUPPLEMENTAL SECTION.

OL-A/USAFETAC/MAC/AWS  
ASHEVILLE NC 28401

LIMITED SURFACE OBSERVATIONS CLIMATIC SUMMARIES--015005

HOURLY OBSERVATIONS: ALL RECORD OR RECORD SPECIAL OBSERVATIONS RECORDED ON THE AWS FORMS 10/10A AT SCHEDULED HOURLY INTERVALS.

SUPPLEMENTAL DATA: DATA DERIVED FROM EARLIER PERIODS IF AVAILABLE, AND/OR FROM ONE OR MORE REPRESENTATIVE SITES AND COMBINED BY A METEOROLOGIST.

DESCRIPTION OF SUMMARIES: PRECEDING EACH PART OF THE RUSSWO IS A BRIEF DISCUSSION OF THE SUMMARY INCLUDING THE MANNER OF PRESENTATION.

HOURLY SUMMARIES CONTAINING "TOTALS" AND "ALL HOURS" ARE ONLY FOR THOSE HOURS SUMMARIZED. IN COMPUTING THESE VALUES THE VALUES IN THE 3-HOUR TIME GROUPS WERE ADDED AND DIVIDED BY THE NUMBER OF GROUPS.

STANDARD 3-HOUR TIME GROUPS: IN ALL SUMMARIES SHOWING DIURNAL VARIATIONS, WE SUMMARIZE DATA USING THE FOLLOWING EIGHT 3-HOUR TIME PERIODS IN LOCAL STANDARD TIME: 0000-0200, 0300-0500, 0600-0800, 0900-1100, 1200-1400, 1500-1700, 1800-2000, 2100-2300 LST.

FOR A DETAILED DESCRIPTION OF EACH SUMMARY WITH EXAMPLES AND EXERCISES ON ITS USAGE, SEE USAFETAC/TN-83-001, "AN AID FOR USING THE REVISED UNIFORM SUMMARY OF SURFACE WEATHER OBSERVATIONS" (RUSSWO).

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PART E: TEMPERATURE AND RELATIVE HUMIDITY SUMMARIES

PART F: PRESSURE SUMMARIES

SUPPLEMENTAL DATA SECTION--SUMMARY OF DAY DATA

AWSMDC NUMBER: THIS NUMBER IS THE AIR WEATHER SERVICE MASTER STATION CATALOG NUMBER. THIS NUMBER IS COMPRISED OF THE WHO NUMBER WITH THE ADDITION OF A SUFFIX (0 THROUGH 9). IN CASES WHERE THERE IS NO DESIGNATED WHO NUMBER, A 6-DIGIT NUMBER IS CREATED IN AGREEMENT WITH WHO RULES PLUS A SIXTH DIGIT. THESE NUMBERS ARE ALSO REFERRED TO AS DATAV OR USAFETAC NUMBERS WHICH UNIQUELY IDENTIFY MORE THAN 15,000 REPORTING STATIONS WORLD WIDE.

NOTE: THE FIRST AND LAST HOUR GROUPS MAY OR MAY NOT CONTAIN ALL THREE HOURS. SEE HOURS SUMMARIZED ON COVER OR STATION HISTORY SHEET TO DETERMINE WHICH HOURS ARE INCLUDED IN THESE TWO HOUR GROUPS.



|      |         |
|------|---------|
| Dist | Special |
| A-1  |         |

| STATION NO ON SUMMARY                        |                              | STATION NAME                       |                     | LATITUDE         |                 | LONGITUDE                                           |                     | FIELD ELEV (FT) |             | CALL SIGN |  | WMO NUMBER |  |
|----------------------------------------------|------------------------------|------------------------------------|---------------------|------------------|-----------------|-----------------------------------------------------|---------------------|-----------------|-------------|-----------|--|------------|--|
| 275950                                       |                              | KAZAN, USSR                        |                     | N 55 47          |                 | E 049 11                                            |                     | 210 Ft          |             | --        |  | 27595      |  |
| STATION LOCATION AND INSTRUMENTATION HISTORY |                              |                                    |                     |                  |                 |                                                     |                     |                 |             |           |  |            |  |
| NUMBER OF LOCATION                           | GEOGRAPHICAL LOCATION & NAME | TYPE OF STATION                    | AT THIS LOCATION    |                  | LATITUDE        | LONGITUDE                                           | ELEVATION ABOVE MSL |                 | OBS PER DAY |           |  |            |  |
|                                              |                              |                                    | FROM                | TO               |                 |                                                     | FIELD (FT)          | HT. BARO.       |             |           |  |            |  |
| 1                                            | KAZAN, USSR                  | FGN                                | NOV 77              | OCT 87           | N 55 47         | E 049 11                                            | 210 Ft              | N/A             | 8           |           |  |            |  |
|                                              |                              |                                    |                     |                  |                 |                                                     |                     |                 |             |           |  |            |  |
| NUMBER OF LOCATION                           | DATE OF CHANGE               | SURFACE WIND EQUIPMENT INFORMATION |                     |                  |                 | REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE |                     |                 |             |           |  |            |  |
|                                              |                              | LOCATION                           | TYPE OF TRANSMITTER | TYPE OF RECORDER | HT ABOVE GROUND |                                                     |                     |                 |             |           |  |            |  |
|                                              |                              | UNKN                               | UNKN                | UNKN             | UNKN            |                                                     |                     |                 |             |           |  |            |  |

USAFETAC

PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE.

CONTINUED ON REVERSE SIDE

| NUMBER<br>OF<br>LOCATION | DATE<br>OF<br>CHANGE | SURFACE WIND EQUIPMENT INFORMATION |                        |                     |                    | REMARKS, ADDITIONAL EQUIPMENT, OR REASON FOR CHANGE |
|--------------------------|----------------------|------------------------------------|------------------------|---------------------|--------------------|-----------------------------------------------------|
|                          |                      | LOCATION                           | TYPE OF<br>TRANSMITTER | TYPE OF<br>RECORDER | HT ABOVE<br>GROUND |                                                     |
|                          |                      |                                    |                        |                     |                    |                                                     |

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## WEATHER CONDITIONS AND ATMOSPHERIC PHENOMENA SUMMARIES

### WEATHER CONDITIONS SUMMARY

1. A PERCENTAGE FREQUENCY OCCURRENCE SUMMARY OF VARIOUS ATMOSPHERIC PHENOMENA AND OBSTRUCTIONS TO VISION.
2. DATA BASED ON HOURLY OBSERVATIONS.
3. SUMMARIZED BY THE STANDARD 3-HOUR TIME GROUPS BY MONTH, MONTHLY AND ANNUALLY (ALL YEARS COMBINED).

### DEFINITIONS:

THUNDERSTORMS: ALL REPORTED THUNDERSTORMS, TORNADOES AND WATERSPOUTS.

RAIN AND/OR DRIZZLE: ALL REPORTED RAIN AND OR DRIZZLE FALLING TO THE GROUND BUT NOT FREEZING.

FREEZING RAIN AND/OR FREEZING DRIZZLE (GLAZE): ALL REPORTED FREEZING RAIN OR FREEZING DRIZZLE.

SNOW AND/OR SLEET: SNOW INCLUDING SNOW PELLETS AND GRAINS, ICE CRYSTALS AND PELLETS, AND/OR SLEET (ICE PELLETS).

HAIL: ALL REPORTED HAIL.

ALL PRECIPITATION: THIS CATEGORY INCLUDES ALL OBSERVATIONS REPORTING PRECIPITATION. BECAUSE MORE THAN ONE TYPE OF PRECIPITATION MAY APPEAR IN A SINGLE OBSERVATION, THE SUM OF THE PERCENTAGES IN THE INDIVIDUAL COLUMNS MAY EXCEED THE PERCENTAGES IN THIS COLUMN.

FOG: ALL REPORTED FOG, ICE FOG AND GROUND FOG.

SMOKE AND/OR HAZE: ALL REPORTED SMOKE, HAZE AND ANY COMBINATION THEREOF.

BLOWING SNOW: ALL REPORTED BLOWING SNOWS INCLUDING DRIFTING WHEN REPORTED.

DUST AND/OR SAND: ALL REPORTED DUST, SAND, BLOWING DUST, BLOWING SAND AND ANY COMBINATION THEREOF. THE ATMOSPHERIC PHENOMENA SUMMARY (DAYS WITH) INCLUDES ONLY THOSE REPORTS WHEN THE PHENOMENA VISIBILITY LESS THAN 5/8 MILES (1000 METERS).

ALL OBSTRUCTIONS TO VISION: INCLUDES ALL REPORTS OF OBSTRUCTIONS TO VISION (FOG THRU DUST/SAND) AND BLOWING SPRAY. BECAUSE MORE THAN ONE PHENOMENA PER OBSERVATION MAY OCCUR, THE SUM OF THE INDIVIDUAL COLUMNS MAY EXCEED THIS COLUMN.

### NOTES:

1. A VALUE IN THE TABLES OF "0" INDICATES LESS THAN .05% OCCURRENCE WHICH IS USUALLY ONLY ONE OCCURRENCE

2. METAR STATIONS (BEGINNING IN JAN 1969) AND SYNOPTIC REPORTING STATIONS RECORDED ON THE AWS FORMS 17/10A AND TRANSMITTED LONGLINE ONLY THE HIGHEST ORDER OF ATMOSPHERIC PHENOMENA OBSERVED. BEGINNING IN JAN 1970, METAR STATIONS RECORDED ALL OBSERVED PHENOMENA BUT CONTINUED TO TRANSMIT ONLY THE HIGHEST ORDER. FOR EXAMPLE, IF THE OBSERVATION CONTAINED RAIN, FOG AND SMOKE, ALL THREE WILL APPEAR ON THE AWS FORMS 17/10A, BUT ONLY THE RAIN WAS TRANSMITTED LONGLINE. THEREFORE ONLY THE RAIN APPEARS IN OUR DATA BASE FOR HOURLY SUMMARIZATION. THIS PRACTICE AFFECTS THE PERCENTAGES IN THE TABLES.

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER CONDITIONS  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275957 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: JAN

| HOURS<br>(LST) | TSTMS | RAIN<br>L/OP<br>GRIZZLE | FRZING<br>RAIN<br>L/OP<br>GRIZZLE | SNOW<br>L/OP<br>SLEET | FAIL | % OPS<br>WITH<br>PRECIP | FOG  | SMOKE<br>L/OP<br>HAZE | BLOWING<br>SNOW | DUST<br>L/OP<br>SAND | % OPS<br>W/CBST<br>TO<br>VISION | TOTAL<br>OBS |
|----------------|-------|-------------------------|-----------------------------------|-----------------------|------|-------------------------|------|-----------------------|-----------------|----------------------|---------------------------------|--------------|
| 01-02          |       | .7                      |                                   | 34.7                  |      | 35.0                    | 24.0 | 1.3                   | 2.3             |                      | 27.0                            | 300          |
| 07-08          |       | 1.0                     | .3                                | 35.5                  |      | 36.5                    | 25.3 | .7                    | 2.0             |                      | 26.0                            | 304          |
| 08-09          |       | 1.4                     | .3                                | 39.3                  |      | 40.3                    | 24.1 |                       | 2.0             |                      | 26.1                            | 295          |
| 09-11          | .4    | 1.1                     | .4                                | 27.6                  |      | 28.7                    | 29.4 | .4                    | 3.3             |                      | 30.0                            | 275          |
| 10-14          |       | .7                      |                                   | 25.2                  |      | 25.8                    | 26.6 | .3                    | 3.7             | .3                   | 31.2                            | 296          |
| 15-17          |       | .3                      |                                   | 23.9                  |      | 23.9                    | 27.2 | .3                    | 3.5             |                      | 31.1                            | 305          |
| 18-20          | .2    | 1.0                     | .3                                | 28.5                  | .3   | 29.8                    | 20.9 | .7                    | 2.0             |                      | 23.5                            | 302          |
| 21-23          |       | .7                      | .3                                | 32.7                  |      | 33.0                    | 20.5 | .7                    | 2.6             |                      | 23.8                            | 303          |
| TOTALS         |       | .1                      | .2                                | 30.9                  | .0   | 31.6                    | 24.7 | .5                    | 2.7             | .0                   | 27.8                            | 2392         |

STATION NUMBER: 275957 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: FEB

| HOURS<br>(LST) | TSTMS | RAIN<br>L/OP<br>GRIZZLE | FRZING<br>RAIN<br>L/OP<br>GRIZZLE | SNOW<br>L/OP<br>SLEET | FAIL | % OPS<br>WITH<br>PRECIP | FOG  | SMOKE<br>L/OP<br>HAZE | BLOWING<br>SNOW | DUST<br>L/OP<br>SAND | % OPS<br>W/CBST<br>TO<br>VISION | TOTAL<br>OBS |
|----------------|-------|-------------------------|-----------------------------------|-----------------------|------|-------------------------|------|-----------------------|-----------------|----------------------|---------------------------------|--------------|
| 01-02          |       | 1.1                     |                                   | 24.9                  |      | 24.9                    | 29.2 | .4                    | .7              |                      | 29.3                            | 273          |
| 03-05          |       | 1.1                     | .4                                | 27.7                  |      | 28.1                    | 31.7 | .4                    | 1.1             |                      | 33.1                            | 278          |
| 06-08          | .4    | .4                      | .7                                | 29.5                  |      | 30.2                    | 29.5 | .4                    | 1.1             |                      | 30.9                            | 275          |
| 09-11          |       | .4                      | .4                                | 16.6                  |      | 17.4                    | 39.9 | .4                    | .8              |                      | 41.1                            | 253          |
| 12-14          |       | .4                      |                                   | 16.0                  |      | 16.4                    | 32.7 | .4                    | 1.1             |                      | 34.2                            | 275          |
| 15-17          |       |                         |                                   | 13.5                  |      | 13.5                    | 26.2 | .4                    | 1.1             |                      | 27.6                            | 275          |
| 18-20          |       |                         | .4                                | 15.4                  |      | 15.7                    | 25.7 | .4                    | 1.4             |                      | 27.5                            | 280          |
| 21-23          |       | .4                      |                                   | 18.7                  |      | 19.1                    | 24.5 | .7                    | 1.4             |                      | 26.6                            | 276          |
| TOTALS         |       | .1                      | .2                                | 20.3                  |      | 20.7                    | 29.8 | .4                    | 1.1             |                      | 31.3                            | 2187         |

GLOBAL CLIMATOLOGY BRANCH  
USAF/ETAC  
AIR WEATHER SERVICE/MTC

PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER CONDITIONS  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 2752 STATION NAME: KAGAN USSR

PERIOD OF RECORD: 78-87  
MONTH: MAR

| FOUR<br>TEST | ESTM | RAIN<br>FOR<br>DRIZZLE | FREEZING<br>RAIN<br>FOR<br>DRIZZLE | SNOW<br>FOR<br>SLEET | HAIR | % OBS<br>WITH<br>PRECIP | FOG  | SMOKE<br>FOR<br>HAIR | BLOWING<br>SNOW | DUST<br>FOR<br>SAND | % OBS<br>W/OBS<br>TO<br>VISION | TOTAL<br>OBS |
|--------------|------|------------------------|------------------------------------|----------------------|------|-------------------------|------|----------------------|-----------------|---------------------|--------------------------------|--------------|
| 1-2          |      | 1.7                    |                                    | 14.4                 |      | 15.1                    | 21.4 | .3                   |                 |                     | 21.7                           | 299          |
| 3-5          |      | 2.0                    |                                    | 13.2                 |      | 14.5                    | 29.6 |                      | .3              |                     | 29.9                           | 304          |
| 6-8          |      | 1.3                    | .3                                 | 11.5                 |      | 12.4                    | 29.0 |                      |                 |                     | 29.0                           | 305          |
| 9-11         |      | 1.4                    | .7                                 | 8.7                  |      | 9.9                     | 27.0 |                      | 1.1             |                     | 28.0                           | 276          |
| 12-14        |      | .7                     | .2                                 | 7.0                  |      | 8.0                     | 24.1 |                      |                 | .2                  | 24.4                           | 299          |
| 15-17        |      | .7                     |                                    | 7.3                  |      | 7.6                     | 14.0 |                      | 1.3             |                     | 15.6                           | 302          |
| 18-20        |      | 4.0                    |                                    | 8.3                  |      | 8.6                     | 15.5 |                      | .7              |                     | 16.0                           | 303          |
| 21-23        |      | 1.0                    |                                    | 11.4                 |      | 11.4                    | 15.7 |                      | .3              |                     | 16.4                           | 306          |
| TOTALS       |      | 1.4                    | .2                                 | 10.2                 |      | 11.0                    | 24.6 | .3                   | .5              | .0                  | 25.1                           | 2394         |

STATION NUMBER: 2752 STATION NAME: KAGAN USSR

PERIOD OF RECORD: 78-87  
MONTH: APR

| FOUR<br>TEST | ESTM | RAIN<br>FOR<br>DRIZZLE | FREEZING<br>RAIN<br>FOR<br>DRIZZLE | SNOW<br>FOR<br>SLEET | HAIR | % OBS<br>WITH<br>PRECIP | FOG  | SMOKE<br>FOR<br>HAIR | BLOWING<br>SNOW | DUST<br>FOR<br>SAND | % OBS<br>W/OBS<br>TO<br>VISION | TOTAL<br>OBS |
|--------------|------|------------------------|------------------------------------|----------------------|------|-------------------------|------|----------------------|-----------------|---------------------|--------------------------------|--------------|
| 1-2          |      | 4.4                    |                                    | 7.1                  |      | 10.9                    | 14.3 | .7                   |                 |                     | 15.0                           | 294          |
| 3-5          |      | 5.4                    |                                    | 9.5                  |      | 13.9                    | 17.2 | .3                   |                 |                     | 17.6                           | 296          |
| 6-8          |      | 4.5                    |                                    | 9.3                  |      | 10.1                    | 25.9 | .3                   |                 |                     | 26.2                           | 290          |
| 9-11         |      | 5.3                    |                                    | 5.2                  |      | 10.5                    | 19.9 | .3                   |                 |                     | 20.2                           | 287          |
| 12-14        |      | 5.4                    |                                    | 5.8                  |      | 10.5                    | 10.8 |                      |                 |                     | 10.6                           | 295          |
| 15-17        |      | 1.5                    |                                    | 5.4                  |      | 10.5                    | 7.1  |                      |                 |                     | 7.1                            | 294          |
| 18-20        |      | 5.4                    | .3                                 | 2.7                  |      | 8.5                     | 9.2  |                      |                 |                     | 9.2                            | 293          |
| 21-23        |      | 5.4                    |                                    | 4.4                  |      | 9.8                     | 10.0 |                      |                 |                     | 12.2                           | 296          |
| TOTALS       |      | 5.6                    | .3                                 | 6.1                  |      | 10.5                    | 14.4 | .3                   |                 |                     | 14.6                           | 2345         |

GLOBAL CLIMATOLOGY BRANCH  
USAF/ETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER CONDITIONS  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275957 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: MAY

| HOURS<br>(LST) | TIME | RAIN<br>E/OR<br>DRIZZLE | FRZING<br>RAIN<br>E/OR<br>DRIZZLE | SNOW<br>E/OR<br>SLEET | HAIL | % OPS<br>WITH<br>PRECIP | FOG | SMOKE<br>E/OR<br>HAZE | BLOWING<br>SNOW | DUST<br>E/OR<br>SAND | % OPS<br>W/OBST<br>TO<br>VISION | TOTAL<br>OBS |
|----------------|------|-------------------------|-----------------------------------|-----------------------|------|-------------------------|-----|-----------------------|-----------------|----------------------|---------------------------------|--------------|
| 00-02          | 1    | 5.7                     | 5.9                               | .7                    |      | 6.3                     | 4.6 | .7                    |                 |                      | 5.3                             | 304          |
| 02-05          | 1    |                         | 4.9                               |                       |      | 4.9                     | 7.9 | .3                    | .3              |                      | 8.5                             | 305          |
| 05-08          | 1    |                         | 5.0                               | .7                    |      | 4.0                     | 7.9 | .3                    |                 |                      | 8.3                             | 302          |
| 08-11          | 1    |                         | 4.9                               | .7                    |      | 5.2                     | 2.9 | .3                    |                 | .3                   | 3.6                             | 306          |
| 11-14          | 1    | 1.1                     | 5.0                               | .7                    | .3   | 6.0                     | 2.6 |                       |                 |                      | 2.6                             | 302          |
| 14-17          | 1    | 1.6                     | 5.2                               | .3                    |      | 6.6                     | 2.0 | .3                    |                 |                      | 2.3                             | 305          |
| 17-20          | 1    | 1.7                     | 5.0                               | .3                    |      | 5.4                     | 1.7 |                       |                 |                      | 1.7                             | 296          |
| 20-23          | 1    | .7                      | 3.9                               | .3                    |      | 4.2                     | 4.2 | .3                    |                 | .3                   | 4.9                             | 306          |
| TOTALS         | 1    | .7                      | 4.9                               | .5                    | .0   | 5.3                     | 4.2 | .3                    | .0              | .1                   | 4.7                             | 2428         |

STATION NUMBER: 275957 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: JUN

| HOURS<br>(LST) | TIME | RAIN<br>E/OR<br>DRIZZLE | FRZING<br>RAIN<br>E/OR<br>DRIZZLE | SNOW<br>E/OR<br>SLEET | HAIL | % OPS<br>WITH<br>PRECIP | FOG  | SMOKE<br>E/OR<br>HAZE | BLOWING<br>SNOW | DUST<br>E/OR<br>SAND | % OPS<br>W/OBST<br>TO<br>VISION | TOTAL<br>OBS |
|----------------|------|-------------------------|-----------------------------------|-----------------------|------|-------------------------|------|-----------------------|-----------------|----------------------|---------------------------------|--------------|
| 00-02          | 1    | 0.7                     | 5.4                               |                       |      | 5.4                     | 5.0  |                       |                 |                      | 5.0                             | 298          |
| 02-05          | 1    | 1.7                     | 7.0                               |                       |      | 7.8                     | 16.6 |                       |                 |                      | 16.6                            | 295          |
| 05-08          | 1    | .7                      | 7.1                               |                       | .3   | 7.4                     | 15.2 | .3                    |                 |                      | 15.5                            | 296          |
| 08-11          | 1    | .7                      | 5.0                               |                       | .7   | 6.4                     | 2.7  |                       |                 |                      | 2.7                             | 295          |
| 11-14          | 1    | 1.1                     | 6.4                               |                       |      | 6.4                     | 1.7  |                       |                 | .3                   | 2.0                             | 297          |
| 14-17          | 1    | 5.6                     | 10.9                              |                       |      | 10.9                    | .7   |                       |                 |                      | .7                              | 294          |
| 17-20          | 1    | 5.1                     | 10.1                              |                       | .3   | 10.4                    | 1.7  |                       |                 | .3                   | 2.0                             | 297          |
| 20-23          | 1    | 2.7                     | 5.5                               |                       |      | 5.5                     | 4.4  |                       |                 |                      | 4.4                             | 295          |
| TOTALS         | 1    | 4.0                     | 6.2                               |                       | .0   | 6.3                     | 5.0  | .0                    |                 | .1                   | 6.1                             | 2367         |

GLOBAL CLIMATELOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER CONDITIONS  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275900 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 76-87  
MONTH: JUL

| HOURS<br>(EST) | TSTMS | RAIN<br>6/0R<br>DRIZZLE | FRZING<br>RAIN<br>6/0R<br>DRIZZLE | SNOW<br>6/0R<br>SLEET | HAIL | % OBS<br>WITH<br>PRECIP | FOG  | SMOKE<br>6/0R<br>HAZE | BLOWING<br>SNOW | DUST<br>6/0R<br>SAND | % OBS<br>W/CBST<br>TO<br>VISION | TOTAL<br>OBS |
|----------------|-------|-------------------------|-----------------------------------|-----------------------|------|-------------------------|------|-----------------------|-----------------|----------------------|---------------------------------|--------------|
| 7-10           | 3.4   | 8.4                     |                                   |                       |      | 9.1                     | 7.2  |                       |                 |                      | 7.2                             | 307          |
| 17-20          | 1.4   | 3.6                     |                                   |                       |      | 3.6                     | 18.9 | .3                    |                 | .3                   | 19.5                            | 307          |
| 2-05           | 1.7   | 4.6                     |                                   |                       |      | 4.6                     | 17.4 | .3                    |                 |                      | 17.8                            | 304          |
| 9-11           | 1.6   | 5.5                     |                                   |                       | .3   | 5.5                     | 4.5  |                       |                 |                      | 4.5                             | 308          |
| 17-19          | 1.1   | 5.3                     |                                   |                       |      | 6.3                     | 1.7  |                       |                 |                      | 1.7                             | 304          |
| 15-17          | 1.1   | 11.6                    |                                   |                       |      | 11.6                    | .3   |                       |                 |                      | .3                              | 302          |
| 14-20          | 4.1   | 5.4                     |                                   |                       |      | 6.2                     | .7   |                       |                 |                      | .7                              | 305          |
| 11-23          | 1.6   | 5.5                     |                                   |                       |      | 5.8                     | 4.2  |                       |                 |                      | 4.2                             | 308          |
| TOTALS         | 2.1   | 6.5                     |                                   |                       | .3   | 6.6                     | 6.8  | .1                    |                 | .6                   | 6.9                             | 2445         |

STATION NUMBER: 275900 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 76-87  
MONTH: AUG

| HOURS<br>(EST) | TSTMS | RAIN<br>6/0R<br>DRIZZLE | FRZING<br>RAIN<br>6/0R<br>DRIZZLE | SNOW<br>6/0R<br>SLEET | HAIL | % OBS<br>WITH<br>PRECIP | FOG  | SMOKE<br>6/0R<br>HAZE | BLOWING<br>SNOW | DUST<br>6/0R<br>SAND | % OBS<br>W/CBST<br>TO<br>VISION | TOTAL<br>OBS |
|----------------|-------|-------------------------|-----------------------------------|-----------------------|------|-------------------------|------|-----------------------|-----------------|----------------------|---------------------------------|--------------|
| 7-10           | 2.1   | 7.2                     |                                   |                       |      | 7.2                     | 7.5  | .3                    |                 |                      | 8.2                             | 305          |
| 17-20          | 1.1   | 5.3                     |                                   |                       |      | 6.3                     | 14.4 |                       |                 |                      | 16.4                            | 304          |
| 2-05           |       | 4.3                     |                                   |                       |      | 4.3                     | 22.4 |                       |                 |                      | 22.4                            | 303          |
| 9-11           | 1.7   | 4.7                     |                                   |                       |      | 5.9                     | 6.9  |                       |                 |                      | 6.9                             | 305          |
| 17-19          | 1.7   | 5.4                     |                                   |                       |      | 6.7                     | 2.0  |                       |                 |                      | 2.0                             | 302          |
| 15-17          | 4.5   | 4.6                     |                                   |                       |      | 6.6                     | 1.3  |                       |                 | .7                   | 2.0                             | 304          |
| 14-20          | 1.1   | 7.4                     |                                   |                       |      | 7.2                     | 1.6  |                       |                 | .3                   | 2.0                             | 305          |
| 11-23          | 1.1   | 7.5                     |                                   |                       |      | 7.5                     | 4.2  |                       |                 |                      | 4.3                             | 305          |
| TOTALS         | 1.7   | 6.5                     |                                   |                       |      | 6.6                     | 8.1  | .6                    |                 | .1                   | 6.3                             | 2433         |

GLOBAL CLIMATOLOGY BRANCH  
USAF/ETAC  
AIR WEATHER SERVICE/HAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER CONDITIONS  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 27595 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: SEP

| HOURS<br>(EST) | TIME | RAIN<br>E/OP<br>DRIZZLE | FRZING<br>RAIN<br>E/OP<br>DRIZZLE | SNOW<br>E/OP<br>SLEET | HAIL | % OBS<br>WITH<br>PRECIP | FOG  | SMOKE<br>E/OP<br>HAZE | BLOWING<br>SNOW | DUST<br>E/OP<br>SAND | % OBS<br>W/OBST<br>TO<br>VISION | TOTAL<br>OBS |
|----------------|------|-------------------------|-----------------------------------|-----------------------|------|-------------------------|------|-----------------------|-----------------|----------------------|---------------------------------|--------------|
| 00-02          |      | .3                      | 11.4                              | .3                    |      | 11.8                    | 14.9 |                       |                 |                      | 14.9                            | 289          |
| 03-05          |      | .3                      | 10.2                              |                       |      | 10.2                    | 21.8 |                       |                 |                      | 21.8                            | 293          |
| 06-08          |      |                         | 9.6                               | .3                    |      | 6.2                     | 31.5 |                       |                 | .3                   | 31.6                            | 292          |
| 09-11          |      |                         | 9.1                               | 1.0                   |      | 9.2                     | 18.3 |                       |                 |                      | 18.3                            | 295          |
| 12-14          |      |                         | 11.5                              | .7                    |      | 12.2                    | 6.6  |                       |                 |                      | 6.6                             | 286          |
| 15-17          |      | 1.0                     | 13.6                              | .3                    |      | 13.9                    | 3.4  |                       |                 |                      | 3.4                             | 294          |
| 18-20          |      | 1.4                     | 13.0                              | .4                    |      | 13.0                    | 9.8  | .7                    |                 |                      | 9.5                             | 285          |
| 21-23          |      |                         | 11.2                              |                       |      | 11.2                    | 10.9 |                       |                 | .3                   | 11.2                            | 294          |
| TOTALS         |      | .4                      | 10.6                              | .4                    |      | 11.0                    | 14.5 | .1                    |                 | .1                   | 14.7                            | 2328         |

STATION NUMBER: 27595 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: OCT

| HOURS<br>(EST) | TIME | RAIN<br>E/OP<br>DRIZZLE | FRZING<br>RAIN<br>E/OP<br>DRIZZLE | SNOW<br>E/OP<br>SLEET | HAIL | % OBS<br>WITH<br>PRECIP | FOG  | SMOKE<br>E/OP<br>HAZE | BLOWING<br>SNOW | DUST<br>E/OP<br>SAND | % OBS<br>W/OBST<br>TO<br>VISION | TOTAL<br>OBS |
|----------------|------|-------------------------|-----------------------------------|-----------------------|------|-------------------------|------|-----------------------|-----------------|----------------------|---------------------------------|--------------|
| 00-02          |      | 9.9                     |                                   | 6.6                   |      | 11.2                    | 27.0 | .3                    |                 |                      | 27.3                            | 304          |
| 03-05          |      | 4.6                     | .7                                | 7.5                   |      | 12.4                    | 20.4 | .3                    |                 |                      | 20.7                            | 306          |
| 06-08          |      | 9.7                     | .7                                | 7.7                   |      | 14.4                    | 34.8 |                       |                 |                      | 34.8                            | 299          |
| 09-11          |      | 9.0                     | .3                                | 7.8                   |      | 11.4                    | 30.4 | .3                    |                 |                      | 30.7                            | 306          |
| 12-14          |      | 9.0                     |                                   | 9.0                   | .3   | 10.1                    | 23.5 | .3                    |                 |                      | 23.8                            | 298          |
| 15-17          |      | 9.9                     |                                   | 9.6                   |      | 11.1                    | 19.0 |                       |                 |                      | 19.0                            | 306          |
| 18-20          |      | 7.0                     |                                   | 7.0                   |      | 12.0                    | 21.9 | .7                    |                 | .3                   | 22.9                            | 301          |
| 21-23          |      | 4.4                     |                                   | 9.7                   |      | 9.8                     | 22.2 | .3                    |                 |                      | 22.6                            | 297          |
| TOTALS         |      | 9.0                     | .7                                | 6.6                   | .3   | 11.6                    | 26.2 | .3                    |                 | .0                   | 26.5                            | 2417         |

GLOBAL CLIMATOLOGY BRANCH  
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PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER CONDITIONS  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275950 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 77-86  
MONTH: NOV

| HOURLS<br>(LST) | TSMS | RAIN<br>6/0R<br>DRIZZLE | FRZING<br>RAIN<br>6/0R<br>DRIZZLE | SNOW<br>6/0R<br>SLEET | HAIR | % OBS<br>WITH<br>PRECIP | FOG  | SMOKE<br>6/0R<br>HAZE | BLOWING<br>SNOW | DUST<br>6/0R<br>SAND | % OBS<br>W/CBST<br>TO<br>VISION | TOTAL<br>OBS |
|-----------------|------|-------------------------|-----------------------------------|-----------------------|------|-------------------------|------|-----------------------|-----------------|----------------------|---------------------------------|--------------|
| 00-02           | .3   | 3.4                     |                                   | 23.1                  |      | 25.9                    | 26.2 |                       | .7              |                      | 26.9                            | 290          |
| 03-05           |      | 5.5                     |                                   | 25.6                  |      | 28.7                    | 26.6 |                       | 1.0             |                      | 27.6                            | 293          |
| 06-08           |      | 3.6                     |                                   | 24.7                  |      | 27.8                    | 20.2 | .3                    | .7              |                      | 31.3                            | 291          |
| 09-11           |      | 3.2                     |                                   | 20.4                  |      | 22.5                    | 22.3 |                       | .4              |                      | 32.6                            | 285          |
| 12-14           |      | 2.7                     | .3                                | 19.9                  |      | 22.0                    | 29.6 |                       | .7              |                      | 30.2                            | 291          |
| 15-17           |      | 2.7                     | .3                                | 14.5                  |      | 17.2                    | 30.7 |                       |                 |                      | 30.7                            | 296          |
| 18-20           |      | 2.7                     | .7                                | 18.7                  |      | 21.4                    | 27.2 |                       | 1.0             |                      | 28.2                            | 294          |
| 21-23           |      | 5.7                     | .3                                | 22.5                  |      | 25.8                    | 24.2 |                       | .7              |                      | 24.8                            | 298          |
| TOTALS          | .3   | 3.7                     | .2                                | 21.2                  |      | 23.9                    | 28.4 | .3                    | .7              |                      | 29.0                            | 2338         |

STATION NUMBER: 275950 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 77-86  
MONTH: DEC

| HOURLS<br>(LST) | TSMS | RAIN<br>6/0R<br>DRIZZLE | FRZING<br>RAIN<br>6/0R<br>DRIZZLE | SNOW<br>6/0R<br>SLEET | HAIR | % OBS<br>WITH<br>PRECIP | FOG  | SMOKE<br>6/0R<br>HAZE | BLOWING<br>SNOW | DUST<br>6/0R<br>SAND | % OBS<br>W/CBST<br>TO<br>VISION | TOTAL<br>OBS |
|-----------------|------|-------------------------|-----------------------------------|-----------------------|------|-------------------------|------|-----------------------|-----------------|----------------------|---------------------------------|--------------|
| 00-02           |      | 1.0                     | .3                                | 35.1                  |      | 36.1                    | 28.1 | .3                    | .3              | .7                   | 29.5                            | 302          |
| 03-05           |      | 2.0                     |                                   | 33.7                  |      | 35.3                    | 32.3 |                       | .7              |                      | 33.0                            | 303          |
| 06-08           | .7   | 2.3                     | .3                                | 33.4                  |      | 36.1                    | 27.4 | .3                    | 1.3             | .3                   | 29.4                            | 299          |
| 09-11           | .4   | 1.4                     |                                   | 17.7                  |      | 18.7                    | 23.2 | .4                    | 1.4             |                      | 35.0                            | 283          |
| 12-14           |      | 2.7                     |                                   | 16.0                  |      | 17.0                    | 33.0 | .3                    | 2.3             | .3                   | 36.0                            | 300          |
| 15-17           |      | 1.0                     |                                   | 16.9                  |      | 17.9                    | 32.2 | .3                    | 2.0             |                      | 34.5                            | 307          |
| 18-20           |      | 1.0                     |                                   | 25.0                  |      | 25.3                    | 29.3 | .3                    | .7              |                      | 30.3                            | 304          |
| 21-23           |      | 1.0                     |                                   | 39.4                  |      | 21.0                    | 29.4 |                       | .7              |                      | 30.1                            | 306          |
| TOTALS          | .3   | 1.4                     | .1                                | 26.0                  |      | 27.2                    | 28.6 | .2                    | 1.2             | .2                   | 32.2                            | 2404         |

GLOBAL CLIMATOLOGY BRANCH  
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PERCENTAGE FREQUENCY OF OCCURRENCE OF WEATHER CONDITIONS  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275957 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 77-87  
MONTH: ALL

|        |                | MONTHLY AVE |                         |                                   |                       |      |                         |      |                       |                 |                      |                                 |              |       |
|--------|----------------|-------------|-------------------------|-----------------------------------|-----------------------|------|-------------------------|------|-----------------------|-----------------|----------------------|---------------------------------|--------------|-------|
|        | HOURS<br>(LST) | TSTMS       | RAIN<br>E/0R<br>DRIZZLE | FRZING<br>RAIN<br>E/0R<br>DRIZZLE | SNOW<br>E/0R<br>SLEET | PALE | % OPS<br>WITH<br>PRECIP | FOG  | SPOKE<br>E/0R<br>HAZE | BLOWING<br>SNOW | DUST<br>E/0R<br>SAND | % OPS<br>W/OBST<br>TO<br>VISION | TOTAL<br>OBS |       |
| JAN    | ALL            | 1           | .1                      | .9                                | .2                    | 30.9 | .0                      | 31.6 | 24.7                  | .5              | 2.7                  | .0                              | 27.8         | 2382  |
| FEB    |                | 1           | .1                      | .5                                | .2                    | 20.3 |                         | 20.7 | 29.8                  | .4              | 1.1                  |                                 | 31.3         | 2187  |
| MAR    |                | 1           | .2                      | 1.4                               | .2                    | 10.2 |                         | 11.0 | 24.6                  | .0              | .5                   | .0                              | 25.1         | 2394  |
| APR    |                | 1           | .0                      | 5.0                               | .0                    | 6.1  |                         | 10.8 | 14.6                  | .2              |                      |                                 | 14.8         | 2345  |
| MAY    |                | 1           | .7                      | 4.9                               |                       | .5   | .0                      | 5.3  | 4.2                   | .3              | .0                   | .1                              | 4.7          | 2428  |
| JUN    |                | 1           | 2.3                     | 8.1                               |                       |      | .2                      | 8.3  | 6.0                   | .0              |                      | .1                              | 6.1          | 2367  |
| JUL    |                | 1           | 2.6                     | 6.5                               |                       |      | .0                      | 6.5  | 6.8                   | .1              |                      | .0                              | 6.9          | 2445  |
| AUG    |                | 1           | 2.1                     | 6.6                               |                       |      |                         | 6.6  | 8.1                   | .0              |                      | .1                              | 8.3          | 2433  |
| SEP    |                | 1           | .4                      | 10.6                              |                       | .4   |                         | 11.0 | 14.5                  | .1              |                      | .1                              | 14.7         | 2328  |
| OCT    |                | 1           |                         | 5.6                               | .2                    | 6.6  | .0                      | 11.6 | 26.2                  | .3              |                      | .0                              | 26.5         | 2417  |
| NOV    |                | 1           | .0                      | 3.7                               | .2                    | 21.2 |                         | 23.9 | 28.4                  | .0              | .7                   |                                 | 29.0         | 2338  |
| DEC    |                | 1           | .1                      | 1.4                               | .1                    | 26.0 |                         | 27.2 | 30.6                  | .2              | 1.2                  | .2                              | 32.2         | 2404  |
| TOTALS |                | 1           | .7                      | 4.6                               | .1                    | 10.2 | .0                      | 14.5 | 18.2                  | .2              | .5                   | .1                              | 19.0         | 28468 |

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SEE SUPPLEMENTAL SECTION (SUMMARY OF DAY DATA) FOR THESE SUMMARIES.

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BIVARIATE PERCENTAGE FREQUENCY TABULATIONS OF SURFACE WINDS

DATA DERIVED FROM HOURLY DATA.

PRESENTED ARE THE PERCENTAGE FREQUENCY OF WIND DIRECTION TO 16 COMPASS POINTS, CALM AND VARIABLE VERSUS WIND SPEED IN KNOTS IN INCREMENTS OF BEAUFORT CLASSIFICATIONS.

PERCENTAGES ARE SHOWN BY BOTH DIRECTIONS AND SPEED, AND IN ADDITION THE MEAN WIND SPEED IS GIVEN FOR EACH DIRECTION.

DATA PRESENTED BY THE STANDARD 3-HOUR TIME GROUPS BY MONTH, MONTHLY AND ANNUALLY (ALL YEARS COMBINED)..

A SEPARATE ANNUAL TABLE PRESENTS THE SAME BIVARIATE DISTRIBUTIONS WITH IMPOSED CEILING/VISIBILITY LIMITATIONS: WHEN VISIBILITY IS EQUAL TO OR GREATER THAN 1 1/2 MILES, THE CEILINGS ARE 200 TO 1400 FEET AND/OR WHEN THE CEILING IS EQUAL TO OR GREATER THAN 200 FEET, THE VISIBILITIES ARE 1/2 THROUGH 2 1/2 MILES.

A PERCENTAGE VALUE OF ".0" IN THESE TABLES INDICATES ONE OR MORE OCCURRENCES AMOUNTING TO LESS THAN .05%.

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
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PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275950 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 79-87  
MONTH: JAN HOURS(IST): 0000-0200

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |     |      |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|-----|------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                  | 4-6 | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56      |              |
| N                      |                      | .3  | 1.7  | 1.7   |       |       |       |       |       |       | 3.7        | 10.7         |
| NNE                    |                      | .7  | 1.3  | .3    |       |       |       |       |       |       | 2.0        | 9.0          |
| NE                     |                      |     | .3   | 2.0   |       |       |       |       |       |       | 2.3        | 12.9         |
| ENE                    |                      | .7  | 1.7  |       |       |       |       |       |       |       | 2.3        | 8.3          |
| E                      |                      | .3  | 1.0  | 2.7   |       |       |       |       |       |       | 4.0        | 12.0         |
| ESE                    |                      | .7  | 2.7  | 2.3   |       |       |       |       |       |       | 5.7        | 10.4         |
| SE                     |                      | .7  | 1.7  | 7.0   | 2.0   | .3    |       |       |       |       | 11.7       | 13.9         |
| SSE                    |                      | 1.0 | 2.7  | 7.3   | 2.0   | 1.0   | .7    |       |       |       | 14.7       | 14.8         |
| S                      |                      | .7  | 2.0  | 10.7  | 1.7   | .3    |       | .3    |       |       | 15.7       | 14.1         |
| SSW                    |                      | .7  | 1.0  | 2.7   | .7    | .3    |       |       |       |       | 5.3        | 12.8         |
| SW                     |                      | .3  | .3   | 2.7   |       |       |       |       |       |       | 3.3        | 12.6         |
| WSW                    |                      | .7  | 1.3  | 2.3   | .3    | .3    |       |       |       |       | 4.7        | 13.1         |
| W                      |                      | 1.0 | .3   | 5.0   | .3    |       |       |       |       |       | 6.7        | 12.2         |
| WNW                    |                      | .7  | 1.3  | 2.7   |       |       |       |       |       |       | 4.7        | 11.4         |
| W                      |                      | .7  | 1.0  | 1.0   | .7    |       |       |       |       |       | 3.0        | 11.9         |
| WNW                    |                      | .7  | .3   | 1.3   |       |       |       |       |       |       | 2.0        | 11.7         |
| VARIABLE               |                      |     |      |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////// |     |      |       |       |       |       |       |       |       | 8.3        | ////         |
| TOTALS                 |                      | 5.7 | 20.7 | 51.7  | 7.7   | 2.3   | .7    | .3    |       |       | 100.0      | 11.8         |

TOTAL NUMBER OF OBSERVATIONS: 300

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275950 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 79-87  
MONTH: JAN HOURS(LST): 0300-0500

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |     |      |       |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|-----|------|-------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                  | 4-6 | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56 |            |              |
| N                      |                      | 1.7 | 1.7  | 1.3   | .3    |       |       |       |       |       |       | 4.3        | 10.5         |
| NNE                    |                      | .7  | 1.3  | 1.0   |       |       |       |       |       |       |       | 3.0        | 9.6          |
| NE                     |                      | .7  | .3   | 1.3   |       |       |       |       |       |       |       | 2.3        | 11.1         |
| ENE                    |                      |     | .7   | 1.0   | .3    |       |       |       |       |       |       | 2.0        | 13.5         |
| E                      |                      |     | 1.7  | 1.3   |       |       |       |       |       |       |       | 3.0        | 10.7         |
| ESE                    |                      | 1.0 | 1.7  | 1.7   |       |       |       |       |       |       |       | 4.3        | 9.4          |
| SE                     |                      | 1.7 | 1.7  | 7.0   | 1.7   | .3    |       |       |       |       |       | 12.3       | 13.0         |
| SSE                    |                      | .3  | 1.3  | 5.3   | 2.7   | 1.0   | .7    |       |       |       |       | 11.3       | 15.7         |
| S                      |                      | .7  | 3.3  | 10.6  | 2.0   | .7    | .3    |       |       |       |       | 17.6       | 13.9         |
| SSW                    |                      | 1.0 | 1.0  | 2.7   | 1.3   |       |       |       |       |       |       | 6.0        | 12.6         |
| SW                     |                      | .7  | 1.0  | 2.7   |       |       |       |       |       |       |       | 5.0        | 12.3         |
| WSW                    |                      | .7  |      | 1.3   | .7    | .3    |       |       |       |       |       | 3.0        | 14.6         |
| W                      |                      | .7  | 2.0  | 3.3   | .7    |       |       |       |       |       |       | 6.0        | 11.7         |
| WNW                    |                      | 1.0 | 2.7  | 2.0   |       |       |       |       |       |       |       | 5.6        | 10.6         |
| NW                     |                      |     | 1.0  | 1.3   | .3    |       |       |       |       |       |       | 2.7        | 11.6         |
| NNW                    |                      | .3  | 1.0  | .3    |       | .3    |       |       |       |       |       | 2.0        | 12.2         |
| VARIABLE               |                      |     |      |       |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////// |     |      |       |       |       |       |       |       |       |       | 9.6        | ////         |
| TOTALS                 |                      | 9.6 | 22.3 | 45.2  | 9.4   | 2.7   | 1.0   |       |       |       |       | 100.0      | 11.5         |

TOTAL NUMBER OF OBSERVATIONS: 751

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM POIRLY OBSERVATIONS

STATION NUMBER: 275950 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: JAN HOURS(IST): 0600-0800

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |     |      |       |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|-----|------|-------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                  | 4-6 | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56 |            |              |
| N                      |                      | .7  | .3   | 2.4   |       |       |       |       |       |       |       | 3.4        | 11.2         |
| NNE                    |                      | 1.7 | 2.0  | 1.0   |       |       |       |       |       |       |       | 4.1        | 8.8          |
| NE                     |                      |     | 1.7  | .7    |       |       |       |       |       |       |       | 2.4        | 10.6         |
| ENE                    |                      |     |      | .7    | .3    |       |       |       |       |       |       | 1.0        | 14.3         |
| E                      |                      | 1.7 | 1.7  | 1.7   |       |       |       |       |       |       |       | 4.4        | 10.0         |
| ESE                    |                      |     | 2.0  | 2.1   | .3    |       |       |       |       |       |       | 4.4        | 12.3         |
| SE                     |                      | .7  | 1.7  | 6.5   | 1.0   | .3    |       |       |       |       |       | 9.9        | 13.7         |
| SSE                    |                      |     | 3.7  | 5.1   | 1.7   | 1.7   |       |       |       |       |       | 11.6       | 13.9         |
| S                      |                      | 1.7 | 2.4  | 9.2   | 1.7   | .3    |       |       |       |       |       | 15.3       | 13.1         |
| SSW                    |                      | 1.0 | 1.7  | 2.4   | .7    | .7    | .7    |       |       |       |       | 6.8        | 14.3         |
| SW                     |                      |     | 1.0  | 2.0   | 1.0   |       |       |       |       |       |       | 4.1        | 13.6         |
| WSW                    |                      | .7  | 1.0  | 2.1   |       |       | .3    | .3    |       |       |       | 5.4        | 14.0         |
| W                      |                      |     | 1.4  | 4.4   | .3    |       |       |       |       |       |       | 6.1        | 12.4         |
| WNW                    |                      | 1.7 | 2.4  | 1.4   |       |       |       |       |       |       |       | 4.8        | 9.6          |
| W                      |                      | 1.7 | 1.0  | 1.0   | .3    |       |       |       |       |       |       | 3.4        | 9.3          |
| WNW                    |                      | .7  | .7   | 1.0   | .3    |       |       |       |       |       |       | 2.4        | 11.9         |
| VARIABLE               |                      |     |      |       |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////// |     |      |       |       |       |       |       |       |       |       | 9.5        | ////         |
| TOTALS                 |                      | 5.8 | 24.8 | 45.6  | 7.8   | 2.7   | 1.4   | .3    |       |       |       | 100.0      | 11.3         |

TOTAL NUMBER OF OBSERVATIONS: 294

GLOBAL CLIMATOLOGY BRANCH  
USAF/ETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM FAIRLY OBSERVATIONS

STATION NUMBER: 275957 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: JAN HOURS/LSIT: 0900-1100

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS |          |          |          |          |          |          |          |          |          | TOTAL<br>% | MEAN<br>WIND |
|------------------------|---------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|------------|--------------|
|                        | 1-3                 | 4-6      | 7-10     | 11-16    | 17-21    | 22-27    | 28-33    | 34-40    | 41-47    | 48-55    | GE 56      |              |
| N                      |                     | 1.1      |          | 1.5      |          |          |          |          |          |          | 2.6        | 11.1         |
| NNE                    |                     | .4       | .4       | 1.1      |          |          |          |          |          |          | 1.8        | 10.4         |
| NE                     |                     | .7       | .4       | 1.5      |          |          |          |          |          |          | 2.6        | 11.1         |
| ENE                    |                     | .4       | .7       | .7       | .4       |          |          |          |          |          | 2.2        | 12.2         |
| E                      |                     |          | .7       | 1.5      |          |          |          |          |          |          | 2.2        | 12.0         |
| ESE                    |                     |          | 2.9      | 2.2      |          |          |          |          |          |          | 5.1        | 10.9         |
| SE                     |                     | .7       | 2.2      | 7.6      | 2.2      |          |          |          |          |          | 12.7       | 13.4         |
| SSE                    |                     | .4       | 2.5      | 7.3      | 1.8      | .7       |          |          | .4       |          | 13.5       | 14.8         |
| S                      |                     | .7       | 2.9      | 17.2     | 2.2      | .7       | .7       |          |          |          | 17.5       | 14.3         |
| SSW                    |                     | 1.1      | 1.5      | .4       |          | .4       |          |          |          |          | 3.3        | 10.6         |
| SW                     |                     |          | 2.2      | 1.5      | .7       |          |          |          |          |          | 4.4        | 11.5         |
| WSW                    |                     | .4       | 1.8      | 1.5      | .4       |          |          |          |          |          | 4.2        | 11.7         |
| W                      |                     | .4       | 1.5      | 7.6      | .4       | .4       |          |          |          |          | 6.2        | 13.3         |
| WNW                    |                     | .7       | 1.5      | 1.1      |          |          |          |          |          |          | 3.3        | 10.2         |
| W                      |                     | .4       | 1.1      | 1.8      | .4       |          |          |          |          |          | 3.6        | 12.3         |
| WNW                    |                     |          | .7       | 1.4      |          | .4       |          |          |          |          | 2.9        | 12.9         |
| VARIABLE               |                     |          |          |          |          |          |          |          |          |          |            |              |
| CALP                   |                     | //////// | //////// | //////// | //////// | //////// | //////// | //////// | //////// | //////// | 12.4       | ////         |
| TOTALS                 |                     | 7.7      | 22.3     | 45.1     | 8.4      | 2.5      | .7       |          | .4       |          | 100.0      | 11.3         |

TOTAL NUMBER OF OBSERVATIONS: 775

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM FOURLY OBSERVATIONS

STATION NUMBER: 275951 STATION NAME: KAZAN, USSR

PERIOD OF RECORD: 78-97  
MONTH: JAN HOURS (LST): 1200-1400

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |     |      |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|-----|------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                  | 4-6 | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56      |              |
| N                      |                      | .7  | .3   | 1.7   |       |       |       |       |       |       | 2.4        | 12.3         |
| NNE                    |                      | .0  | 1.3  | 1.7   |       |       |       |       |       |       | 3.4        | 9.8          |
| NE                     |                      | .7  | 1.0  | 1.0   |       |       |       |       |       |       | 2.4        | 10.9         |
| ENE                    |                      | .7  | .7   |       |       |       |       |       |       |       | 1.0        | 8.7          |
| E                      |                      |     | .3   | 2.7   |       |       |       |       |       |       | 3.0        | 12.0         |
| ESE                    |                      | .7  | 1.7  | 0.0   |       |       |       |       |       |       | 4.0        | 10.5         |
| SE                     |                      | 1.3 | 2.4  | 6.1   | 1.7   | .7    |       |       |       |       | 11.8       | 12.9         |
| SSE                    |                      | 1.7 | 2.4  | 7.1   | 2.7   | 1.7   | .3    |       |       |       | 14.5       | 14.2         |
| S                      |                      |     | 2.7  | 4.4   | 3.0   | .7    |       |       |       |       | 14.8       | 14.4         |
| SSW                    |                      | .7  | .7   | 0.4   | .3    | .7    |       | .3    |       |       | 4.7        | 15.5         |
| SW                     |                      | 1.0 | 1.3  | 1.0   | 1.0   |       |       |       |       |       | 4.4        | 11.0         |
| WSW                    |                      |     | 1.0  | 0.0   |       |       |       |       |       |       | 4.0        | 12.7         |
| W                      |                      | .0  | 1.7  | 0.7   | .3    | .3    | .3    |       |       |       | 7.1        | 12.2         |
| WNW                    |                      | .7  | .3   | 0.7   | 1.0   |       |       |       |       |       | 4.4        | 14.4         |
| W                      |                      |     |      | 1.0   | .3    |       |       |       |       |       | 2.4        | 14.4         |
| WNW                    |                      | .7  | 1.2  | 1.3   | .3    |       |       |       |       |       | 7.7        | 11.0         |
| VARIABLE               |                      |     |      |       |       |       |       |       |       |       |            |              |
| CALC                   | //////////////////// |     |      |       |       |       |       |       |       |       | 12.1       | ////         |
| TOTALS                 |                      | 9.1 | 19.0 | 45.5  | 10.6  | 3.7   | .7    | .3    |       |       | 100.0      | 11.4         |

TOTAL NUMBER OF OBSERVATIONS: 297

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM FOURLY OBSERVATIONS

STATION NUMBER: 275500 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 7A 37  
MONTH: JAN HOURS(EST): 1500-1700

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS |      |       |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|---------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-7                 | 8-10 | 11-15 | 16-20 | 21-25 | 26-30 | 31-35 | 36-40 | 41-45 | 46-50 |            |              |
| N                      |                     | 1.7  | 1.7   | 7.0   |       |       |       |       |       |       | 4.3        | 10.8         |
| NNE                    |                     | 1.7  | 1.0   | 7.0   |       |       |       |       |       |       | 3.6        | 11.1         |
| NL                     |                     | 1.7  | 1.7   | 1.3   |       |       |       |       |       |       | 2.0        | 7.3          |
| NNE                    |                     |      | 1.3   | 1.3   |       |       |       |       |       |       | 1.7        | 12.4         |
| E                      |                     | 1.7  | 1.3   | 1.7   |       |       |       |       |       |       | 3.3        | 11.4         |
| ESE                    |                     | 1.7  | 2.0   | 4.6   |       |       | 1.3   |       |       |       | 7.3        | 12.5         |
| SE                     |                     |      | 1.7   | 7.3   | 1.7   | 1.3   |       |       |       |       | 9.9        | 14.0         |
| ESE                    |                     | 1.7  | 2.6   | 5.3   | 3.0   | 1.0   | 1.3   |       |       |       | 12.9       | 14.9         |
| S                      |                     | 1.7  | 4.0   | 7.3   | 3.0   | 1.7   | 1.3   |       |       |       | 16.9       | 14.0         |
| SSW                    |                     |      |       | 7.3   | 1.0   |       |       |       |       |       | 4.3        | 13.9         |
| SW                     | 1.7                 | 1.7  | 1.0   | 1.0   | 1.7   |       |       |       |       |       | 3.3        | 11.0         |
| WSW                    |                     | 1.7  | 1.7   | 4.3   | 1.3   |       | 1.3   |       |       |       | 7.9        | 11.6         |
| W                      |                     | 1.7  | 1.0   | 2.6   | 1.3   |       | 1.3   |       |       |       | 4.6        | 13.6         |
| WNW                    |                     |      | 1.0   | 7.3   |       | 1.3   |       |       |       |       | 3.6        | 13.4         |
| W                      |                     |      | 1.0   | 2.3   | 1.3   |       |       |       |       |       | 3.6        | 12.6         |
| WNW                    |                     | 1.0  | 1.3   | 1.3   | 1.3   |       |       |       |       |       | 3.0        | 10.8         |
| VECTABLE               |                     |      |       |       |       |       |       |       |       |       |            |              |
| CELM                   |                     |      |       |       |       |       |       |       |       |       | 7.9        | ////         |
| TOTALS                 | 1.7                 | 7.0  | 21.1  | 44.8  | 9.6   | 3.3   | 1.7   |       |       |       | 100.0      | 11.9         |

TOTAL NUMBER OF OBSERVATIONS: 312

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM FOURLY OBSERVATIONS

STATION NUMBER: 07590 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 79-87  
MONTH: JAN HOURS/EST: 1800-2000

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |      |       |       |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-7                  | 8-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | 56-60 | 61-66 |            |              |
| 0                      |                      | .7   | 1.3   | 2.6   | .7    |       |       |       |       |       |       | 5.0        | 12.5         |
| 90                     |                      |      | 1.0   | .7    |       |       |       |       |       |       |       | 3.6        | 9.8          |
| 180                    |                      | .7   | .3    | .7    |       |       |       |       |       |       |       | 1.7        | 10.4         |
| 270                    |                      | .7   | .3    | 1.0   |       |       |       |       |       |       |       | 1.7        | 10.4         |
| 30                     |                      | .7   | 1.7   | 2.3   | .3    |       |       |       |       |       |       | 5.0        | 10.9         |
| 60                     |                      | .7   | 1.7   | 2.3   | .3    | .7    |       |       |       |       |       | 5.6        | 12.6         |
| 90                     |                      | .7   | 1.0   | 4.3   | 1.3   | .3    |       |       |       |       |       | 11.6       | 14.0         |
| 120                    |                      | 1.0  | 2.6   | 5.3   | 3.0   | .3    | .7    | .3    |       |       |       | 13.2       | 15.0         |
| 150                    |                      | 1.3  | 3.3   | 2.3   | 2.3   | .3    |       |       |       |       |       | 14.6       | 12.5         |
| 180                    |                      | .7   | .7    | 3.6   |       |       |       |       |       |       |       | 5.0        | 12.1         |
| 210                    |                      | .7   | 2.0   | 2.0   | .3    |       |       |       |       |       |       | 5.0        | 11.0         |
| 240                    |                      | .7   | 1.7   | 2.6   | .3    |       |       |       |       |       |       | 5.0        | 12.2         |
| 270                    |                      | .7   | .7    | 2.0   | .3    |       |       |       |       |       |       | 4.0        | 13.4         |
| 300                    |                      |      | .7    | 2.6   | .7    |       |       |       |       |       |       | 4.0        | 13.0         |
| 330                    |                      |      | 2.0   | 2.6   |       |       |       |       |       |       |       | 4.6        | 11.6         |
| 360                    |                      | .3   | .3    | .7    |       |       |       |       |       |       |       | 2.0        | 9.7          |
| VARIABLE               |                      |      |       |       |       |       |       |       |       |       |       |            |              |
| GRAND TOTAL            | //////////////////// |      |       |       |       |       |       |       |       |       |       | 9.6        | ////         |
| TOTAL                  |                      | 6.7  | 22.3  | 47.7  | 6.6   | 1.7   | .7    | .3    |       |       |       | 100.0      | 11.5         |

TOTAL NUMBER OF OBSERVATIONS: 702

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275957 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: JAN HOURS(IST): 2100-2500

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS |     |      |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|---------------------|-----|------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                 | 4-6 | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56      |              |
| 0                      |                     | .7  | 1.0  | 3.3   | .3    |       |       |       |       |       | 5.3        | 12.2         |
| 10                     |                     |     | 1.7  | .3    |       |       |       |       |       |       | 1.7        | 10.4         |
| 20                     |                     | .7  | 1.7  | .7    | .7    |       |       |       |       |       | 3.7        | 10.9         |
| 30                     |                     | .7  | .7   | .7    |       |       |       |       |       |       | 1.3        | 11.0         |
| 40                     |                     | .7  | 1.3  | 7.0   | .3    |       |       |       |       |       | 9.7        | 10.9         |
| 50                     |                     | .7  | 1.7  | 2.7   |       |       |       |       |       |       | 4.7        | 11.6         |
| 60                     |                     | .7  | 2.0  | 6.7   | 1.0   | 1.7   |       |       |       |       | 11.3       | 13.6         |
| 70                     |                     | 1.7 | 1.7  | 9.0   | 1.7   |       | .7    |       |       |       | 14.7       | 14.1         |
| 80                     |                     | .7  | 3.0  | 6.3   | 1.7   | 1.3   |       |       |       |       | 14.7       | 13.9         |
| 90                     |                     | .7  | .7   | 4.0   | .3    |       |       |       |       |       | 5.7        | 12.9         |
| 100                    |                     | 1.3 | .7   | 2.7   |       |       |       |       |       |       | 4.7        | 11.1         |
| 110                    |                     | .7  | 1.0  | 7.7   | .3    |       |       |       |       |       | 9.3        | 12.0         |
| 120                    |                     | .7  | 1.0  | 4.0   |       |       |       |       |       |       | 5.7        | 11.9         |
| 130                    |                     |     | 1.3  | 2.3   |       |       |       |       |       |       | 3.7        | 12.5         |
| 140                    |                     | .7  | 1.3  | 1.3   | .3    |       |       |       |       |       | 3.3        | 11.5         |
| 150                    |                     | .7  | 1.3  | 1.7   |       |       |       |       |       |       | 2.7        | 10.0         |
| VARIABLE               |                     |     |      |       |       |       |       |       |       |       |            |              |
| CALM                   |                     |     |      |       |       |       |       |       |       |       | 6.3        | ////         |
| TOTALS                 |                     | 9.7 | 21.3 | 57.7  | 9.7   | 2.3   | .7    |       |       |       | 107.0      | 11.8         |

TOTAL NUMBER OF OBSERVATIONS: 300

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275950 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: JAN HOURS(LST): ALL

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |     |      |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|-----|------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                  | 4-6 | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56      |              |
| N                      |                      | .6  | 1.0  | 2.1   | .0    |       |       |       |       |       | 3.9        | 11.5         |
| NNE                    |                      | .4  | 1.5  | 1.0   |       |       |       |       |       |       | 2.9        | 9.8          |
| NE                     |                      | .6  | .8   | 1.0   | .1    |       |       |       |       |       | 2.4        | 10.7         |
| ENE                    |                      | .7  | .6   | .7    | .1    |       |       |       |       |       | 1.6        | 11.3         |
| E                      |                      | .5  | 1.2  | 2.1   | .1    |       |       |       |       |       | 3.9        | 11.1         |
| ESE                    |                      | .4  | 2.0  | 2.7   | .1    | .0    | .0    |       |       |       | 5.3        | 11.4         |
| SE                     |                      | .8  | 1.8  | 7.0   | 1.4   | .4    |       |       |       |       | 11.4       | 13.5         |
| SSE                    |                      | .7  | 2.5  | 6.5   | 2.3   | .8    | .4    | .0    | .0    |       | 13.2       | 14.7         |
| S                      |                      | .6  | 3.0  | 9.0   | 2.2   | .9    | .2    | .0    |       |       | 15.9       | 13.8         |
| SSW                    |                      | .7  | .9   | 2.7   | .5    | .2    | .1    | .0    |       |       | 5.1        | 13.2         |
| SW                     | .0                   | .5  | 1.2  | 2.1   | .5    |       |       |       |       |       | 4.3        | 11.7         |
| WSW                    |                      | .5  | 1.2  | 2.7   | .3    | .1    | .1    | .0    |       |       | 1.4        | 12.6         |
| W                      |                      | .0  | 1.1  | 3.6   | .3    | .1    | .1    |       |       |       | 5.8        | 12.5         |
| WNW                    |                      | .6  | 1.4  | 2.2   | .7    | .0    |       |       |       |       | 4.3        | 11.8         |
| WW                     |                      | .7  | 1.1  | 1.7   | .3    |       |       |       |       |       | 3.3        | 11.8         |
| NNW                    |                      | .5  | .9   | 1.1   | .1    | .1    |       |       |       |       | 2.6        | 11.2         |
| VARIABLE               |                      |     |      |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////// |     |      |       |       |       |       |       |       |       | 9.3        | ////         |
| TOTALS                 | .0                   | 6.7 | 21.9 | 40.1  | 8.8   | 2.4   | .4    | .0    | .0    |       | 100.0      | 11.6         |

TOTAL NUMBER OF OBSERVATIONS: 372

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM FOURLY OBSERVATIONS

STATION NUMBER: 27595 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: FEB HOURS(1ST): 0000-0200

| DIRECTION<br>(DULG-ES) | WIND SPEED IN KNOTS  |      |      |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|------|------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                  | 4-6  | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56      |              |
| N                      |                      | 1.4  | 2.6  | 2.2   | .7    |       |       |       |       |       | 7.0        | 10.5         |
| NNE                    |                      | 1.1  | 1.8  | 1.8   |       |       |       |       |       |       | 4.8        | 9.8          |
| NE                     |                      | 1.1  | 2.6  | 2.6   |       |       |       |       |       |       | 6.2        | 10.2         |
| NNE                    |                      | .4   | 2.2  | 1.1   |       |       |       |       |       |       | 3.7        | 10.0         |
| E                      |                      | .7   | 2.2  | 1.1   | .7    |       |       |       |       |       | 4.8        | 10.6         |
| ESE                    |                      | .4   | 1.6  | 1.6   |       |       |       |       |       |       | 4.0        | 11.3         |
| SE                     |                      | .4   | 1.8  | 4.0   | .4    |       |       |       |       |       | 6.6        | 12.7         |
| SSE                    |                      | .7   | 1.5  | 2.6   | .7    | .7    |       |       |       |       | 6.2        | 13.9         |
| S                      |                      | .4   | 2.2  | 2.6   | 1.5   | .4    |       |       |       |       | 7.7        | 12.7         |
| SSW                    |                      |      | .7   | 1.5   | .4    |       |       |       |       |       | 2.6        | 13.3         |
| SW                     |                      | .7   | 1.8  | 1.8   |       |       |       |       |       |       | 4.4        | 10.5         |
| SSW                    |                      | .7   | 1.1  | 1.8   |       |       |       |       |       |       | 3.7        | 11.0         |
| W                      |                      | 1.5  | 2.6  | 2.2   | .4    |       |       |       |       |       | 7.7        | 10.6         |
| WSW                    |                      | .7   | .7   | 1.1   | .4    | .4    |       |       |       |       | 3.3        | 12.7         |
| W                      |                      | 1.1  | 2.2  | 2.2   |       |       |       |       |       |       | 7.3        | 9.2          |
| WSW                    |                      | 1.1  | 2.2  | 1.5   | .4    |       |       |       |       |       | 6.2        | 9.9          |
| VARIABLE               |                      |      |      |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////// |      |      |       |       |       |       |       |       |       | 13.9       | ////         |
| TOTALS                 |                      | 12.4 | 31.5 | 37.7  | 5.5   | 1.5   |       |       |       |       | 100.0      | 9.6          |

TOTAL NUMBER OF OBSERVATIONS: 273

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GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM FAIRLY OBSERVATIONS

STATION NUMBER: 275957 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: FEB HOURS(IST): 0300-0500

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |      |      |       |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                  | 4-6  | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56 |            |              |
| N                      |                      | 2.2  | 2.5  | 3.6   | .4    |       |       |       |       |       |       | 8.7        | 10.4         |
| NNE                    |                      | .4   | .7   | 1.8   | .4    |       |       |       |       |       |       | 3.3        | 13.0         |
| NE                     |                      | .4   | 2.5  | 0.9   |       |       |       |       |       |       |       | 5.8        | 10.9         |
| NNE                    |                      | .7   | 1.4  | 1.8   |       |       |       |       |       |       |       | 4.0        | 10.2         |
| E                      |                      | .7   | .7   | 2.9   | .4    |       |       |       |       |       |       | 4.7        | 12.1         |
| ESE                    |                      | .7   | 1.1  | 0.2   |       |       |       |       |       |       |       | 4.0        | 10.7         |
| SE                     |                      | .4   | 1.1  | 3.6   |       | .4    |       |       |       |       |       | 5.4        | 12.6         |
| SSE                    |                      | .4   | 2.2  | 2.5   | .4    | .4    |       |       |       |       |       | 5.9        | 13.0         |
| S                      |                      |      | 1.4  | 3.6   | 1.1   | 1.1   | .4    |       |       |       |       | 7.6        | 15.5         |
| SSW                    |                      | .4   | 1.1  | 1.1   | .4    |       |       |       |       |       |       | 2.9        | 11.1         |
| SW                     |                      | .7   | 1.1  | 1.8   | .4    |       |       |       |       |       |       | 4.0        | 10.8         |
| WSW                    |                      | 1.4  | 2.2  | 1.4   |       | .4    |       |       |       |       |       | 5.8        | 10.7         |
| W                      |                      | 1.1  | 2.9  | 0.2   | .7    |       |       |       |       |       |       | 6.9        | 11.1         |
| WNW                    |                      | .4   | .7   | .7    | .4    |       |       |       |       |       |       | 2.2        | 11.8         |
| W                      |                      | 1.4  | 1.4  | 0.5   | .4    |       |       |       |       |       |       | 5.8        | 10.4         |
| WNW                    |                      | 1.1  | 1.8  | 2.5   | .4    |       |       |       |       |       |       | 5.8        | 10.6         |
| VARIABLE               |                      |      |      |       |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////// |      |      |       |       |       |       |       |       |       |       | 17.4       | ////         |
| TOTALS                 |                      | 12.7 | 25.0 | 37.7  | 5.1   | 2.2   | .4    |       |       |       |       | 100.0      | 9.6          |

TOTAL NUMBER OF OBSERVATIONS: 276

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/HAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM FAIRLY OBSERVATIONS

STATION NUMBER: 275950 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: FEB HOURS(IST): 0600-0800

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |      |      |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|------|------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                  | 4-6  | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56      |              |
| N                      |                      | 2.5  | 3.3  | 1.3   | .4    |       |       |       |       |       | 9.8        | 9.9          |
| NNE                    |                      | .7   | .4   | 1.1   | .4    |       |       |       |       |       | 2.5        | 11.9         |
| NE                     |                      | 1.1  | 2.2  | 2.5   | .4    |       |       |       |       |       | 6.2        | 10.5         |
| ENE                    |                      | .4   | .7   | 1.8   |       |       |       |       |       |       | 2.9        | 11.5         |
| E                      |                      | .4   | 2.2  | 2.5   |       | .4    |       |       |       |       | 5.5        | 12.2         |
| ESE                    |                      | .7   | .4   | 1.8   |       |       |       |       |       |       | 2.9        | 10.8         |
| SE                     |                      |      | 2.9  | 3.3   | .4    |       |       |       |       |       | 6.5        | 11.5         |
| SSE                    |                      | .4   | 2.2  | 2.5   | .4    |       |       |       |       |       | 5.5        | 11.7         |
| S                      |                      | .7   | 1.8  | 2.9   | 1.5   |       |       |       |       |       | 6.9        | 12.8         |
| SSW                    |                      |      | 2.2  | 2.5   | .7    | .4    |       |       |       |       | 5.8        | 13.2         |
| SW                     |                      | .7   | .4   | 2.2   |       |       |       |       |       |       | 3.3        | 10.7         |
| WSW                    |                      | 1.1  | 1.5  | 1.8   |       |       |       |       |       |       | 4.4        | 10.3         |
| W                      |                      | .7   | 1.5  | 2.9   | 1.1   | .4    |       |       |       |       | 6.5        | 12.8         |
| WNW                    |                      | 1.1  | 1.1  | 1.5   | .4    | .4    |       |       |       |       | 4.4        | 11.3         |
| WW                     |                      | .7   | 1.5  | 1.5   | .7    |       |       |       |       |       | 4.4        | 11.0         |
| WNW                    |                      | 1.1  | 1.5  | 1.5   | .4    |       |       |       |       |       | 5.1        | 9.9          |
| VARIABLE               |                      |      |      |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////// |      |      |       |       |       |       |       |       |       | 17.5       | ////         |
| TOTALS                 |                      | 12.4 | 25.5 | 35.6  | 6.5   | 1.5   |       |       |       |       | 100.0      | 9.4          |

TOTAL NUMBER OF OBSERVATIONS: 275

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275950 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 72-87  
MONTH: FEB HOURS(LST): 0900-1100

| DIRECTION<br>(000-359) | WIND SPEED IN KNOTS  |      |      |       |       |       |       |       |       |       |    | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|------|------|-------|-------|-------|-------|-------|-------|-------|----|------------|--------------|
|                        | 1-3                  | 4-6  | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | 56 |            |              |
| N                      |                      | 1.0  | 1.6  | 5.5   | .4    |       |       |       |       |       |    | 8.7        | 11.5         |
| NNE                    |                      | .8   | .8   | .8    | .4    |       |       |       |       |       |    | 2.8        | 11.0         |
| NE                     |                      | .2   | 1.6  | 1.2   |       |       |       |       |       |       |    | 3.6        | 10.0         |
| ENE                    | .4                   |      | 1.6  | 2.8   |       |       |       |       |       |       |    | 4.7        | 10.7         |
| E                      |                      |      | 2.0  | 1.6   |       |       |       |       |       |       |    | 3.6        | 10.7         |
| ESE                    |                      | .4   | 1.2  | 2.4   | .4    |       |       |       |       |       |    | 4.3        | 11.9         |
| SE                     |                      | .4   | 2.0  | 2.8   | .8    |       |       |       |       |       |    | 5.9        | 12.0         |
| SSE                    |                      |      | .8   | 2.8   | .4    |       |       |       |       |       |    | 4.7        | 13.5         |
| S                      |                      | 1.2  | 2.0  | 3.2   | .4    | .4    |       |       |       |       |    | 7.1        | 11.7         |
| SSW                    |                      | 1.6  | .8   | 1.2   | .8    |       |       |       |       |       |    | 4.3        | 10.9         |
| SW                     |                      | .8   | 2.4  | 2.0   |       |       |       |       |       |       |    | 5.1        | 10.3         |
| WSW                    |                      | 1.2  | .4   | 2.4   |       |       |       |       |       |       |    | 4.0        | 10.8         |
| W                      |                      | .8   | 2.4  | 4.3   | .4    | .4    |       |       |       |       |    | 8.3        | 12.6         |
| WNW                    |                      | 1.2  | 2.0  | 2.4   | .4    |       |       |       |       |       |    | 5.9        | 10.7         |
| WW                     |                      | .8   | 1.6  | .8    | .4    |       | .4    |       |       |       |    | 4.0        | 12.6         |
| WNW                    |                      | 1.2  | 3.2  | 2.4   |       |       |       |       |       |       |    | 6.7        | 9.4          |
| Variable               |                      |      |      |       |       |       |       |       |       |       |    |            |              |
| CALM                   | //////////////////// |      |      |       |       |       |       |       |       |       |    | 17.0       | ////         |
| TOTALS                 | .8                   | 12.7 | 26.1 | 32.3  | 4.7   | .8    | .4    |       |       |       |    | 100.0      | 9.4          |

TOTAL NUMBER OF OBSERVATIONS: 203

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM FOURLY OBSERVATIONS

STATION NUMBER: 275950 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: FEB HOURS(IST): 1200-1400

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |     |      |       |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|-----|------|-------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                  | 4-6 | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | 56-63 |            |              |
| N                      |                      | 1.6 | 2.2  | 4.0   |       |       |       |       |       |       |       | 7.6        | 10.8         |
| NNE                    |                      |     | .7   | 2.5   | .4    |       |       |       |       |       |       | 3.6        | 13.7         |
| NE                     |                      | .7  | 1.5  | 2.2   | .4    |       |       |       |       |       |       | 4.7        | 11.3         |
| NNE                    |                      |     | 1.1  | 1.5   |       |       |       |       |       |       |       | 2.5        | 11.1         |
| E                      |                      | .4  | 1.1  | 1.8   |       |       |       |       |       |       |       | 3.3        | 12.0         |
| ESE                    |                      |     |      | 1.1   |       |       |       |       |       |       |       | 1.1        | 13.3         |
| SE                     |                      | .4  | 2.9  | 2.5   | 1.5   |       |       |       |       |       |       | 7.3        | 12.7         |
| SSE                    |                      | .7  | 1.8  | 3.6   | 1.1   |       |       |       |       |       |       | 7.3        | 12.1         |
| S                      |                      | 1.5 | 2.5  | 2.5   |       | .4    |       |       |       |       |       | 6.9        | 11.1         |
| SSW                    |                      |     | 1.1  | 1.8   | .4    |       |       |       |       |       |       | 3.3        | 13.7         |
| SW                     |                      |     | 2.2  | 2.5   |       |       |       |       |       |       |       | 4.7        | 11.1         |
| WSW                    |                      | .7  | 1.8  | 2.9   | .4    |       |       |       |       |       |       | 5.8        | 11.2         |
| W                      |                      | .4  | 2.9  | 6.2   |       | .4    |       |       |       |       |       | 9.8        | 12.6         |
| WNW                    |                      |     | .7   | 2.2   |       |       |       |       |       |       |       | 2.9        | 11.8         |
| W                      |                      | 1.1 | 1.5  | 1.8   | .7    |       |       |       |       |       |       | 5.1        | 11.1         |
| WNW                    |                      | 1.1 | 2.5  | 1.8   |       |       |       |       |       |       |       | 5.5        | 9.5          |
| VARIABLE               |                      |     |      |       |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////// |     |      |       |       |       |       |       |       |       |       | 18.5       | ////         |
| TOTALS                 |                      | 7.4 | 26.5 | 41.1  | 4.7   | .7    |       |       |       |       |       | 100.0      | 9.5          |

TOTAL NUMBER OF OBSERVATIONS: 775

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM FOURLY OBSERVATIONS

STATION NUMBER: 27595 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: FEB HOURS(LST): 1500-1700

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS                  |      |      |       |       |       |       |       |       |       |       | TOTAL<br>Σ | MEAN<br>WIND |
|------------------------|--------------------------------------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                                  | 4-6  | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56 |            |              |
| N                      |                                      | 1.1  | 1.8  | 4.0   | .4    |       |       |       |       |       |       | 7.3        | 11.4         |
| NNE                    |                                      | 1.4  | 1.5  | 1.6   | 1.1   |       |       |       |       |       |       | 5.8        | 11.6         |
| NE                     |                                      | .7   | 1.5  | 7.3   |       |       |       |       |       |       |       | 9.5        | 10.8         |
| ENE                    |                                      |      | .7   | .7    |       |       |       |       |       |       |       | 1.5        | 11.0         |
| E                      |                                      | .4   | .4   | 1.5   | .7    |       |       |       |       |       |       | 2.9        | 13.3         |
| ESE                    |                                      | .7   | .7   | 1.8   |       |       |       |       |       |       |       | 3.3        | 11.1         |
| SE                     |                                      | .7   | 1.1  | 1.8   | .4    | .4    |       |       |       |       |       | 4.4        | 12.8         |
| SSE                    |                                      | .7   | 2.5  | 2.9   | 1.8   | .7    |       |       |       |       |       | 8.7        | 13.1         |
| S                      |                                      | 1.4  | 1.1  | 4.0   | .4    | .4    |       |       |       |       |       | 7.6        | 11.8         |
| SSW                    |                                      |      | 1.5  | 1.5   | .4    |       |       |       |       |       |       | 3.3        | 13.0         |
| SW                     |                                      | 1.1  | 1.5  | 1.5   |       |       |       |       |       |       |       | 4.0        | 9.8          |
| WSW                    |                                      | .7   |      | 5.1   | .7    |       |       |       |       |       |       | 6.5        | 12.8         |
| W                      |                                      | 1.4  | 2.9  | 8.4   | .4    |       |       |       |       |       |       | 13.1       | 11.8         |
| WNW                    |                                      |      |      | 2.5   | .4    | .4    |       |       |       |       |       | 3.3        | 15.3         |
| NW                     |                                      | 1.1  | 1.1  | .7    |       |       |       |       |       |       |       | 2.9        | 8.3          |
| NNW                    |                                      | 1.1  | 3.3  | .7    | .4    |       |       |       |       |       |       | 5.5        | 9.1          |
| VARIABLE               |                                      |      |      |       |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////////////////////// |      |      |       |       |       |       |       |       |       |       | 14.5       | ////         |
| TOTALS                 |                                      | 10.1 | 21.5 | 40.2  | 6.9   | 1.8   |       |       |       |       |       | 100.0      | 10.0         |

TOTAL NUMBER OF OBSERVATIONS: 275

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275957 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: FEB HOURS(IST): 1800-2000

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS                  |      |      |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|--------------------------------------|------|------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                                  | 4-6  | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56      |              |
| N                      |                                      | .7   | 4.0  | 3.6   | .7    |       |       |       |       |       | 9.0        | 11.4         |
| NNE                    |                                      | .4   | 1.1  | 1.1   | .7    |       |       |       |       |       | 3.2        | 12.0         |
| NE                     |                                      | 1.1  | 2.5  | 1.8   |       |       |       |       |       |       | 5.4        | 10.3         |
| ENE                    |                                      |      | 1.8  | 1.1   | .4    |       |       |       |       |       | 3.2        | 11.7         |
| E                      |                                      | .7   | 2.5  | 1.4   | .4    | .4    |       |       |       |       | 5.4        | 11.2         |
| ESE                    |                                      | .7   | 1.1  | .7    | .4    |       |       |       |       |       | 2.9        | 10.6         |
| SE                     |                                      | .4   | 1.4  | 1.8   | 1.4   |       |       |       |       |       | 5.0        | 13.1         |
| SSE                    |                                      |      | 1.4  | 3.0   | 1.1   | .4    |       |       |       |       | 6.1        | 14.1         |
| S                      |                                      | 1.4  | 2.2  | 4.3   | .4    | .4    |       |       |       |       | 8.6        | 12.0         |
| SSW                    |                                      |      | 1.4  | 1.8   |       |       |       |       |       |       | 3.2        | 10.7         |
| SW                     |                                      | 1.4  | 2.2  | 2.2   |       |       |       |       |       |       | 6.1        | 9.8          |
| WSW                    |                                      | 1.4  | 1.8  | 1.1   | .4    |       |       |       |       |       | 4.7        | 9.8          |
| W                      |                                      | 2.2  | 4.3  | 5.8   | .4    |       |       |       |       |       | 12.6       | 10.9         |
| WNW                    |                                      | .4   | 1.1  | 2.5   | .4    |       |       |       |       |       | 4.3        | 12.3         |
| WW                     |                                      | .4   | 1.1  | .7    | .4    |       |       |       |       |       | 2.5        | 11.0         |
| NNW                    |                                      | .7   |      | .7    |       |       |       |       |       |       | 1.4        | 10.0         |
| VARIABLE               |                                      |      |      |       |       |       |       |       |       |       |            |              |
| CAL"                   | //////////////////////////////////// |      |      |       |       |       |       |       |       |       | 16.2       | ////         |
| TOTALS                 |                                      | 10.0 | 29.9 | 37.8  | 6.8   | 1.1   |       |       |       |       | 100.0      | 9.5          |

TOTAL NUMBER OF OBSERVATIONS: 278

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275950 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 79-87  
MONTH: FEB HOURS (LST): 2100-2300

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS |      |      |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|---------------------|------|------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                 | 4-6  | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56      |              |
| N                      |                     | 1.4  | 1.4  | 3.6   | .4    | .4    |       |       |       |       | 7.2        | 11.9         |
| NNE                    |                     | .7   | .7   | 2.2   |       |       |       |       |       |       | 3.6        | 11.0         |
| NE                     |                     | .4   | 2.9  | 1.1   | .7    |       |       |       |       |       | 5.0        | 11.1         |
| NNE                    |                     | .4   | 1.4  | 2.2   |       |       |       |       |       |       | 4.0        | 11.6         |
| E                      |                     | 1.1  | 1.8  | 2.2   | .4    |       |       |       |       |       | 5.4        | 10.6         |
| ESE                    |                     | .7   | 1.4  | 1.1   | .4    |       |       |       |       |       | 3.6        | 10.7         |
| SE                     |                     | 1.8  | 2.5  | 2.5   | .4    | .4    |       |       |       |       | 7.6        | 11.3         |
| SSE                    |                     | .4   | 1.8  | 3.2   | .7    | .7    |       |       |       |       | 6.8        | 13.7         |
| S                      |                     | 1.1  | 1.8  | 5.0   | .4    | .4    |       |       |       |       | 8.6        | 12.3         |
| SSW                    |                     |      | .7   | 1.4   |       |       |       |       |       |       | 2.2        | 11.3         |
| SW                     |                     | 1.1  | 1.1  | 1.8   | .4    |       |       |       |       |       | 4.3        | 10.6         |
| WSW                    |                     | .7   | .7   | 1.1   |       |       |       |       |       |       | 2.5        | 9.1          |
| W                      |                     | .7   | 4.0  | 2.9   | .4    |       |       |       |       |       | 7.9        | 11.0         |
| WSW                    |                     | .4   | 5.4  | 1.5   |       | .4    |       |       |       |       | 7.9        | 10.7         |
| SW                     |                     | .7   | .4   | 1.4   |       |       |       |       |       |       | 2.5        | 10.9         |
| WSW                    |                     | 1.4  | 1.8  | 1.1   | .4    |       |       |       |       |       | 4.7        | 9.9          |
| VARIABLE               |                     |      |      |       |       |       |       |       |       |       |            |              |
| CALM                   |                     |      |      |       |       |       |       |       |       |       | 16.2       | ////         |
| TOTALS                 |                     | 12.9 | 24.9 | 34.5  | 4.3   | 2.2   |       |       |       |       | 100.0      | 9.5          |

TOTAL NUMBER OF OBSERVATIONS: 276

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275950 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: FEB HOURS(IST): ALL

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |      |      |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|------|------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                  | 4-6  | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56      |              |
| N                      |                      | 1.7  | 2.4  | 3.7   | .4    | .7    |       |       |       |       | 8.2        | 10.9         |
| NNE                    |                      | .7   | 1.0  | 1.6   | .4    |       |       |       |       |       | 3.7        | 11.7         |
| NE                     |                      | .2   | 2.2  | 2.2   | .2    |       |       |       |       |       | 5.3        | 10.7         |
| ENE                    | .7                   | .7   | 1.4  | 1.6   | .7    |       |       |       |       |       | 3.3        | 10.9         |
| E                      |                      | .5   | 1.0  | 1.7   | .3    | .1    |       |       |       |       | 4.4        | 11.5         |
| ESE                    |                      | .5   | 1.0  | 1.6   | .1    |       |       |       |       |       | 2.3        | 11.1         |
| SE                     |                      | .5   | 2.0  | 2.0   | .6    | .1    |       |       |       |       | 6.1        | 12.3         |
| SSE                    |                      | .4   | 1.8  | 2.9   | .8    | .4    |       |       |       |       | 6.3        | 13.1         |
| S                      |                      | 1.0  | 2.0  | 3.5   | .7    | .4    | .0    |       |       |       | 7.7        | 12.5         |
| SSW                    |                      | .7   | 1.2  | 1.6   | .4    | .7    |       |       |       |       | 3.4        | 12.2         |
| SW                     |                      | .5   | 1.6  | 2.0   | .1    |       |       |       |       |       | 4.5        | 10.4         |
| WSW                    |                      | 1.0  | 1.2  | 2.2   | .2    | .7    |       |       |       |       | 4.7        | 10.9         |
| W                      |                      | 1.1  | 2.9  | 4.4   | .5    | .1    |       |       |       |       | 9.1        | 11.6         |
| WNW                    |                      | .5   | 1.5  | 1.6   | .3    | .7    |       |       |       |       | 4.3        | 11.8         |
| W                      |                      | 1.1  | 1.7  | 1.6   | .3    |       | .0    |       |       |       | 4.3        | 10.5         |
| WNW                    |                      | 1.0  | 2.1  | 1.6   | .2    |       |       |       |       |       | 5.1        | 9.8          |
| VARIABLE               |                      |      |      |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////// |      |      |       |       |       |       |       |       |       |            | 16.4         |
| TOTALS                 | .                    | 10.7 | 27.0 | 37.1  | 5.6   | 1.5   | .1    |       |       |       | 100.0      | 9.6          |

TOTAL NUMBER OF OBSERVATIONS: 2193

GLOBAL CLIMATOLOGY BRANCH  
USAF/ETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275957 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: MAR HOURS(UT): 0000-0200

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |      |      |       |       |       |       |       |       |       | TOTAL<br># | MEAN<br>WIND |
|------------------------|----------------------|------|------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                  | 4-6  | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56      |              |
| N                      |                      | 2.7  | 3.0  | .3    |       |       |       |       |       |       | 6.0        | 7.9          |
| NNE                    |                      | .3   | 1.3  | .3    |       |       |       |       |       |       | 2.0        | 8.7          |
| NE                     |                      | 2.0  | 2.0  | .3    |       |       |       |       |       |       | 4.3        | 8.2          |
| ENE                    |                      | 1.7  | 1.7  | .3    |       |       |       |       |       |       | 3.3        | 8.0          |
| E                      |                      | .3   | 1.7  | 1.0   |       |       |       |       |       |       | 3.0        | 9.8          |
| ESE                    |                      | 1.0  | 2.3  | 3.7   |       |       |       |       |       |       | 7.0        | 11.0         |
| SE                     |                      | .7   | 3.0  | 5.7   |       |       |       |       |       |       | 9.4        | 11.7         |
| SSE                    |                      |      | 2.3  | 5.0   | 1.0   | .7    |       |       |       |       | 10.0       | 13.0         |
| S                      |                      | 1.7  | 4.0  | 4.7   | .7    |       |       |       |       |       | 11.0       | 10.9         |
| SSW                    |                      |      | 2.7  | 2.0   |       |       |       |       |       |       | 4.3        | 10.6         |
| SW                     |                      | 1.7  | 2.3  | 1.3   | .3    |       |       |       |       |       | 5.4        | 9.7          |
| WSW                    |                      | .7   | .7   | 1.7   |       |       |       |       |       |       | 3.0        | 10.4         |
| W                      |                      | .7   | .7   | 2.3   |       |       |       |       |       |       | 3.3        | 11.8         |
| WNW                    |                      | .7   | .7   | 1.3   |       |       |       |       |       |       | 2.3        | 10.0         |
| WW                     |                      | .7   |      | .7    | 1.0   |       |       |       |       |       | 2.3        | 13.0         |
| WNW                    |                      | 1.7  | 1.7  | 2.3   |       | .3    |       |       |       |       | 5.7        | 11.2         |
| VARIABLE               |                      |      |      |       |       |       |       |       |       |       |            |              |
| CALC                   | //////////////////// |      |      |       |       |       |       |       |       |       | 17.4       | ////         |
| TOTALS                 |                      | 14.7 | 20.6 | 33.1  | 3.0   | 1.0   |       |       |       |       | 100.0      | 8.8          |

TOTAL NUMBER OF OBSERVATIONS: 294

GLOBAL CLIMATOLOGY BRANCH  
USAF/ETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 27595 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 7A-87  
MONTH: MAR HOURS (LST): 0300-0500

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS |      |      |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|---------------------|------|------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                 | 4-6  | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56      |              |
| N                      |                     | 2.6  | 1.3  | 2.3   |       |       |       |       |       |       | 6.2        | 9.3          |
| NNE                    |                     | .7   | 2.3  |       |       |       |       |       |       |       | 2.6        | 8.3          |
| NE                     |                     | 1.0  | 2.3  | 1.3   |       |       |       |       |       |       | 4.6        | 9.3          |
| ENE                    |                     |      | 1.6  | .7    |       |       |       |       |       |       | 2.3        | 9.7          |
| E                      |                     | .3   | 1.6  | .7    | .3    |       |       |       |       |       | 3.0        | 11.0         |
| ESE                    |                     | .7   | 3.0  | 3.0   | .3    |       |       |       |       |       | 6.9        | 11.0         |
| SE                     |                     | 2.6  | 3.3  | 5.9   |       |       |       |       |       |       | 11.9       | 10.4         |
| SE                     |                     | 1.3  | 3.6  | 4.6   | .3    | .7    |       |       |       |       | 10.5       | 11.8         |
| S                      |                     | 2.0  | 2.0  | 5.3   | .7    |       |       |       |       |       | 9.9        | 11.3         |
| SSW                    |                     | .3   | 1.3  | 1.0   |       |       |       |       |       |       | 2.6        | 10.3         |
| SW                     |                     | 2.7  | 1.6  | 1.6   |       |       |       |       |       |       | 5.6        | 8.6          |
| WSW                    |                     | .7   | .7   | 2.0   |       |       |       |       |       |       | 3.0        | 11.8         |
| W                      |                     | .7   | .3   | 1.6   | .3    |       | .7    |       |       |       | 3.3        | 13.8         |
| WNW                    |                     | .7   | .3   | 1.0   |       |       |       |       |       |       | 1.6        | 11.6         |
| NW                     |                     | .7   |      | 1.3   |       |       |       |       |       |       | 1.6        | 13.2         |
| NNW                    |                     | 2.0  | 2.6  | 2.0   |       | .3    |       |       |       |       | 6.9        | 9.6          |
| VARIABLE               |                     |      |      |       |       |       |       |       |       |       |            |              |
| CALM                   |                     |      |      |       |       |       |       |       |       |       | 17.4       | ////         |
| TOTALS                 |                     | 17.1 | 26.0 | 34.2  | 2.0   | 1.0   | .3    |       |       |       | 100.0      | 8.7          |

TOTAL NUMBER OF OBSERVATIONS: 704

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MTC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275550 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: MAR HOURS (LST): 0400-0600

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |      |       |       |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-7                  | 8-10 | 11-15 | 16-20 | 21-25 | 26-30 | 31-35 | 36-40 | 41-45 | 46-50 | GE 56 |            |              |
| 0                      |                      | 1.7  | 1.6   | 1.6   | .3    |       |       |       |       |       |       | 6.6        | 10.2         |
| 30                     |                      | 1.6  | 2.7   | .7    |       |       |       |       |       |       |       | 4.6        | 8.9          |
| 60                     |                      | .7   | 1.3   | .3    |       |       |       |       |       |       |       | 2.3        | 5.0          |
| 90                     |                      |      | 1.3   | 1.0   |       |       |       |       |       |       |       | 2.3        | 10.2         |
| 120                    |                      | .7   | 1.6   | 2.0   | .3    |       |       |       |       |       |       | 4.6        | 11.1         |
| 150                    |                      | 1.7  | 2.0   | 1.6   | .3    | .7    |       |       |       |       |       | 5.9        | 10.9         |
| 180                    |                      | 1.0  | 3.6   | 7.5   | .3    |       |       |       |       |       |       | 13.1       | 11.5         |
| 210                    |                      | .7   | 4.3   | 4.9   | .7    | .7    |       |       |       |       |       | 11.1       | 11.8         |
| 240                    |                      | 1.0  | 1.6   | 5.2   |       | .3    |       |       |       |       |       | 8.2        | 12.0         |
| 270                    |                      | 1.7  | 2.3   | 1.0   |       |       |       |       |       |       |       | 4.3        | 5.9          |
| 300                    |                      | 1.7  | 1.6   | 1.3   |       |       |       |       |       |       |       | 3.3        | 9.2          |
| 330                    |                      |      | .7    | 2.0   |       |       |       |       |       |       |       | 2.6        | 12.3         |
| 360                    |                      | .7   | 1.6   | 1.3   |       |       |       |       |       |       |       | 3.6        | 10.0         |
| 390                    |                      | .7   |       | 1.3   |       |       |       |       |       |       |       | 1.6        | 11.2         |
| 420                    |                      | .7   | .7    | 1.0   | .3    |       |       |       |       |       |       | 2.0        | 12.2         |
| 450                    |                      | 1.7  | 3.4   | 1.6   |       |       |       |       |       |       |       | 5.9        | 9.3          |
| UNDETER                |                      |      |       |       |       |       |       |       |       |       |       |            |              |
| ONLY                   | //////////////////// |      |       |       |       |       |       |       |       |       |       | 17.2       | ////         |
| TOTALS                 |                      | 11.4 | 31.7  | 34.4  | 2.3   | 1.7   |       |       |       |       |       | 100.0      | 8.9          |

TOTAL NUMBER OF OBSERVATIONS: 3.5

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GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOLWY OBSERVATIONS

STATION NUMBER: 27595J STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: MAR HOURS(LST): 0900-1100

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |      |      |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|------|------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                  | 4-6  | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56      |              |
| N                      |                      | 1.6  | 3.6  | 2.6   | .4    | .4    |       |       |       |       | 9.5        | 10.3         |
| NNE                    |                      | 1.1  | 1.5  | .4    |       |       |       |       |       |       | 2.9        | 8.3          |
| NL                     |                      | 1.1  | 1.8  | 2.2   |       |       |       |       |       |       | 5.1        | 9.9          |
| ENE                    |                      | .7   | 1.1  | .4    |       |       |       |       |       |       | 2.2        | 8.3          |
| E                      |                      | .7   |      | .7    |       |       |       |       |       |       | 1.5        | 9.5          |
| ESE                    |                      | 1.6  | 2.2  | 3.6   | .4    | .4    |       |       |       |       | 8.0        | 11.5         |
| SE                     |                      | 1.6  | 3.6  | 4.7   |       |       |       |       |       |       | 10.2       | 10.5         |
| SSE                    |                      | 1.6  | 3.6  | 7.3   | .7    |       |       |       |       |       | 13.1       | 11.3         |
| S                      |                      | 1.6  | 1.5  | 4.4   | .7    | .4    |       |       |       |       | 9.8        | 11.9         |
| SSW                    |                      | .7   | 1.5  | 1.1   |       |       |       |       |       |       | 3.3        | 9.1          |
| SW                     |                      |      | 1.1  | .7    | .4    |       |       |       |       |       | 2.2        | 11.8         |
| WSW                    |                      |      | 1.8  | .7    |       |       |       |       |       |       | 2.6        | 10.0         |
| W                      |                      |      | .7   | 2.2   | .7    |       |       |       |       |       | 3.6        | 13.6         |
| WNW                    |                      |      | 1.1  |       |       |       |       |       |       |       | 1.1        | 9.3          |
| W                      |                      |      | 1.1  | 1.0   | .4    |       |       |       |       |       | 2.3        | 12.8         |
| WNW                    |                      | .7   | 2.3  | 1.5   |       |       |       |       |       |       | 5.5        | 9.7          |
| VARIABLE               |                      |      |      |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////// |      |      |       |       |       |       |       |       |       | 17.2       | ////         |
| TOTALS                 |                      | 14.2 | 29.6 | 24.3  | 3.6   | 1.1   |       |       |       |       | 100.0      | 8.9          |

TOTAL NUMBER OF OBSERVATIONS: 274

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275950 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: MAR HOURS (LST): 1200-1400

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |      |      |       |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                  | 4-6  | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56 |            |              |
| N                      |                      | .7   | 1.7  | 1.7   | .7    |       |       |       |       |       |       | 4.7        | 11.6         |
| NNE                    |                      | 0.0  | 1.7  | 0.3   |       | .3    |       |       |       |       |       | 6.4        | 10.5         |
| NE                     |                      | 1.7  | 1.3  | 1.3   |       |       |       |       |       |       |       | 4.4        | 9.1          |
| ENE                    |                      |      | .3   |       |       |       |       |       |       |       |       | .3         | 8.0          |
| E                      |                      |      |      | .7    | .3    |       |       |       |       |       |       | 1.0        | 17.0         |
| ESE                    |                      | 1.0  | .7   | 0.0   |       |       |       |       |       |       |       | 3.7        | 10.5         |
| SE                     |                      | 1.0  | 1.3  | 0.7   | .7    |       |       |       |       |       |       | 6.7        | 11.9         |
| SSE                    |                      | 0.0  | 4.4  | 7.4   | 1.0   | .7    |       |       |       |       |       | 16.4       | 11.6         |
| S                      |                      | 1.7  | 4.0  | 8.1   | 1.0   |       |       |       |       |       |       | 14.4       | 11.7         |
| SSW                    |                      |      | .7   | 3.7   | .3    |       |       |       |       |       |       | 4.7        | 13.9         |
| SW                     |                      |      | 1.7  | 1.7   |       |       |       |       |       |       |       | 3.4        | 11.8         |
| WSW                    |                      |      | 1.0  | 1.0   | .3    |       |       |       |       |       |       | 2.3        | 12.4         |
| W                      |                      | .7   | 1.0  | 4.0   | .3    |       |       |       |       |       |       | 5.7        | 13.2         |
| WNW                    |                      |      | .3   | 1.0   |       |       |       |       |       |       |       | 1.3        | 12.5         |
| WW                     |                      | .3   | 1.0  | 1.7   |       |       |       |       |       |       |       | 3.0        | 10.7         |
| WNW                    |                      | 1.7  | 1.0  | .7    |       |       |       |       |       |       |       | 3.0        | 8.7          |
| VARIABLE               |                      |      |      |       |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////// |      |      |       |       |       |       |       |       |       |       | 18.5       | ////         |
| TOTALS                 |                      | 11.4 | 22.1 | 41.9  | 4.7   | 1.7   |       |       |       |       |       | 107.0      | 9.4          |

TOTAL NUMBER OF OBSERVATIONS: 258

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM FOURLY OBSERVATIONS

STATION NUMBER: 275951 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 79-87  
MONTH: MAR HOURS(IST): 1500-1700

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS |      |      |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|---------------------|------|------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                 | 4-6  | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56      |              |
| N                      |                     | 1.0  | 2.3  | 3.3   |       |       |       |       |       |       | 6.6        | 10.4         |
| NNE                    |                     | 1.7  | 3.3  | 1.7   | .3    |       |       |       |       |       | 5.6        | 9.9          |
| NE                     |                     | 1.0  | 1.3  | 1.3   |       |       |       |       |       |       | 3.7        | 10.2         |
| NNE                    |                     |      | .3   | .3    |       |       |       |       |       |       | .7         | 11.0         |
| E                      |                     | .7   | .3   | .7    | .3    |       |       |       |       |       | 1.7        | 12.6         |
| ESE                    |                     | 1.0  | 1.0  | 1.0   |       |       |       |       |       |       | 3.7        | 9.1          |
| SE                     |                     | 2.0  | 3.0  | 3.3   | .3    |       |       |       |       |       | 8.6        | 10.3         |
| SSE                    |                     | 2.7  | 3.3  | 6.3   | 1.0   | 1.7   |       |       |       |       | 15.9       | 12.7         |
| S                      |                     | .7   | 7.3  | 6.6   |       |       |       |       |       |       | 14.6       | 10.8         |
| SSE                    |                     | .3   | 2.3  | 2.7   |       |       |       |       |       |       | 5.3        | 11.6         |
| SW                     |                     | .7   | 1.0  | 2.0   |       |       |       |       |       |       | 3.7        | 11.3         |
| WSW                    |                     |      | .7   | 1.3   | .3    |       |       |       |       |       | 2.3        | 13.2         |
| W                      |                     | .7   | .7   | 4.3   | 1.3   |       |       |       |       |       | 6.6        | 14.2         |
| WSW                    |                     |      | 1.3  | 1.3   | .3    |       |       |       |       |       | 3.7        | 12.1         |
| NO                     |                     | .3   | 1.0  | .7    | .3    |       |       |       |       |       | 2.3        | 11.0         |
| NOA                    |                     |      |      | .7    | .3    |       |       |       |       |       | 1.0        | 15.7         |
| VARIABLE               |                     |      |      |       |       |       |       |       |       |       |            |              |
| CALM                   |                     |      |      |       |       |       |       |       |       |       | 15.6       | ////         |
| TOTALS                 |                     | 11.7 | 28.9 | 39.5  | 4.7   | 1.7   |       |       |       |       | 100.0      | 9.7          |

TOTAL NUMBER OF OBSERVATIONS: 301

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/HAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM FOURLY OBSERVATIONS

STATION NUMBER: 27595 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 7P-87  
MONTH: MAR HOURS(EST): 1800-2000

| DIRECTION<br>(DIRECTIONS) | WIND SPEED IN KNOTS  |      |      |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|---------------------------|----------------------|------|------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                           | 1-3                  | 4-6  | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56      |              |
| N                         |                      | .7   | 2.0  | 7.3   |       |       |       |       |       |       | 6.0        | 10.9         |
| NNE                       |                      | 2.0  | 1.7  | 1.0   |       |       |       |       |       |       | 4.6        | 8.3          |
| NE                        |                      | 1.7  | 2.0  | 1.3   |       |       |       |       |       |       | 4.6        | 8.9          |
| ENE                       |                      |      | 1.0  |       |       |       |       |       |       |       | 1.0        | 8.7          |
| E                         |                      | 1.7  | .3   | 1.3   | .3    |       |       |       |       |       | 3.6        | 10.1         |
| ESE                       |                      | 1.0  | 1.7  | 2.6   | .3    |       |       |       |       |       | 5.6        | 11.1         |
| SE                        |                      | 2.7  | 3.3  | 3.0   | .7    | .7    |       |       |       |       | 9.9        | 11.3         |
| SSE                       |                      | 1.7  | 5.3  | 5.6   |       | .3    |       |       |       |       | 12.6       | 11.0         |
| S                         |                      | 1.0  | 6.0  | 7.3   | .3    | .3    |       |       |       |       | 14.9       | 11.2         |
| SSW                       |                      | .7   | 1.2  | 2.3   |       |       |       |       |       |       | 4.0        | 11.3         |
| SW                        |                      | .7   | 1.0  | 1.0   |       |       | .3    |       |       |       | 3.0        | 11.9         |
| WSW                       |                      | .7   | 1.7  | .7    | .3    |       |       |       |       |       | 3.3        | 9.9          |
| W                         |                      | 1.7  | .7   | 5.0   | .7    |       |       |       |       |       | 7.9        | 12.0         |
| WNW                       |                      |      | 1.3  | 1.3   |       | .3    | .3    |       |       |       | 3.0        | 14.2         |
| WW                        |                      |      | .3   | .3    |       |       |       |       |       |       | .7         | 11.0         |
| WNW                       |                      | .7   | .3   | .7    | .3    | .3    |       |       |       |       | 2.0        | 14.3         |
| VARIABLE                  |                      |      |      |       |       |       |       |       |       |       |            |              |
| CALM                      | //////////////////// |      |      |       |       |       |       |       |       |       | 13.2       | ////         |
| TOTALS                    |                      | 14.4 | 29.8 | 36.4  | 3.0   | 2.7   | .7    |       |       |       | 100.0      | 9.6          |

TOTAL NUMBER OF OBSERVATIONS: 702

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275950 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: MAR HOURS(IST): 2100-2300

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |      |      |       |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                  | 4-6  | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56 |            |              |
| N                      |                      | 1.6  | 2.6  | 2.0   |       |       |       |       |       |       |       | 6.2        | 9.3          |
| NNE                    |                      | 1.0  |      | .3    |       |       |       |       |       |       |       | 1.3        | 8.5          |
| NE                     |                      | 1.0  | 1.3  | .7    |       |       |       |       |       |       |       | 2.9        | 8.7          |
| ENE                    |                      |      | 2.6  |       |       |       |       |       |       |       |       | 2.6        | 9.0          |
| E                      |                      | 2.0  | 2.0  | .3    |       | .3    |       |       |       |       |       | 4.6        | 9.2          |
| ESE                    |                      | .7   | 1.6  | 1.3   |       |       |       |       |       |       |       | 3.2        | 11.8         |
| SE                     |                      | 1.7  | 3.9  | 5.2   | 1.0   | .3    |       |       |       |       |       | 11.8       | 11.9         |
| SSE                    |                      | .7   | 2.9  | 6.5   | .7    | .7    |       |       |       |       |       | 11.4       | 12.7         |
| S                      |                      | 1.0  | 5.2  | 3.3   | .7    |       |       |       |       |       |       | 10.1       | 10.4         |
| SSW                    |                      | .7   | .7   | 2.3   | .3    |       |       |       |       |       |       | 3.9        | 11.4         |
| SW                     |                      | 2.0  | 2.0  | 1.0   | .3    |       |       |       |       |       |       | 5.2        | 8.7          |
| WSW                    |                      | .7   | .3   | 2.0   |       |       |       |       |       |       |       | 2.6        | 12.0         |
| W                      | .7                   |      | .7   | 2.7   |       |       |       |       |       |       |       | 3.6        | 12.1         |
| WNW                    |                      | 1.7  | 1.3  | 1.6   |       | .3    |       |       |       |       |       | 4.2        | 10.7         |
| NW                     |                      | .3   | .3   | .7    |       |       | .7    |       |       |       |       | 1.6        | 13.8         |
| NNW                    |                      |      | 2.3  | 2.9   | .7    | .3    |       |       |       |       |       | 5.2        | 12.3         |
| VARIABLE               |                      |      |      |       |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////// |      |      |       |       |       |       |       |       |       |       | 16.3       | ////         |
| TOTALS                 | .7                   | 10.1 | 29.4 | 35.0  | 3.6   | 2.0   | .7    |       |       |       |       | 100.0      | 9.2          |

TOTAL NUMBER OF OBSERVATIONS: 306

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 27595 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 7A-87  
MONTH: MAR HOURS (LST): ALL

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |      |      |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|------|------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                  | 4-6  | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56      |              |
| N                      |                      | 1.6  | 2.5  | 2.1   | .2    | .0    |       |       |       |       | 6.4        | 9.9          |
| NNE                    |                      | 1.1  | 1.8  | .8    | .0    | .0    |       |       |       |       | 3.8        | 9.2          |
| NE                     |                      | 1.2  | 1.7  | 1.1   |       |       |       |       |       |       | 4.0        | 9.1          |
| ENE                    |                      | .3   | 1.3  | .3    |       |       |       |       |       |       | 1.9        | 9.0          |
| E                      |                      | .8   | 1.0  | .9    | .2    | .0    |       |       |       |       | 2.9        | 10.6         |
| ESE                    |                      | 1.0  | 1.8  | 2.6   | .2    | .1    |       |       |       |       | 5.7        | 11.0         |
| SE                     |                      | 1.7  | 3.1  | 4.7   | .4    | .1    |       |       |       |       | 10.2       | 11.2         |
| SSE                    |                      | 1.7  | 3.9  | 6.2   | .7    | .5    |       |       |       |       | 12.6       | 12.0         |
| S                      |                      | 1.7  | 4.0  | 5.6   | .5    | .1    |       |       |       |       | 11.5       | 11.2         |
| SSW                    |                      | .4   | 1.5  | 2.0   | .1    |       |       |       |       |       | 4.1        | 11.0         |
| SW                     |                      | 1.0  | 1.5  | 1.3   | .1    |       | .0    |       |       |       | 4.0        | 10.0         |
| WSW                    |                      | .3   | .9   | 1.4   | .1    |       |       |       |       |       | 2.7        | 11.4         |
| W                      |                      | .5   | .8   | 2.0   | .4    |       | .0    |       |       |       | 4.7        | 12.7         |
| WNW                    |                      | .0   | .8   | 1.1   | .0    | .1    | .0    |       |       |       | 2.3        | 11.6         |
| W                      |                      | .7   | .5   | 1.0   | .3    |       | .0    |       |       |       | 2.1        | 12.2         |
| NNW                    |                      | .0   | 1.9  | 1.5   | .2    | .2    |       |       |       |       | 4.6        | 10.6         |
| VARIABLE               |                      |      |      |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////// |      |      |       |       |       |       |       |       |       | 16.6       | ////         |
| TOTALS                 |                      | 12.6 | 26.8 | 36.7  | 3.3   | 1.3   | .2    |       |       |       | 100.0      | 9.2          |

TOTAL NUMBER OF OBSERVATIONS: 4369

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MSC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM POLARLY OBSERVATIONS

STATION NUMBER: 270950 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: APR HOURS (LST): 0000-0200

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |      |      |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|------|------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                  | 4-6  | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | 56         |              |
| N                      |                      | .7   | 1.7  | .7    |       |       |       |       |       |       | 2.7        | 8.8          |
| NNE                    |                      | 1.4  | 1.7  | 1.7   |       |       |       |       |       |       | 4.8        | 9.1          |
| NE                     | .7                   | .7   | 1.0  | 0.0   | .3    |       |       |       |       |       | 4.1        | 11.1         |
| NNE                    |                      |      | 1.7  | .3    |       |       |       |       |       |       | 2.0        | 8.7          |
| E                      |                      | .7   | 3.1  | 1.7   |       | .3    |       |       |       |       | 5.8        | 10.5         |
| ESE                    |                      | .7   | 3.1  | 1.0   |       | .7    |       |       |       |       | 5.1        | 10.6         |
| SE                     |                      | .7   | 5.1  | 0.4   | .3    |       |       |       |       |       | 6.5        | 10.0         |
| SSE                    |                      | 1.7  | 3.7  | 3.4   |       |       |       |       |       |       | 8.8        | 10.3         |
| S                      | .3                   | 2.7  | 2.7  | 3.4   | .3    |       |       |       |       |       | 8.8        | 9.9          |
| SSW                    |                      | 1.0  | 1.7  | 2.4   | .3    |       |       |       |       |       | 5.4        | 10.6         |
| SW                     |                      | 1.7  | 2.0  | 1.7   |       | .3    |       |       |       |       | 5.1        | 10.6         |
| WSW                    |                      | .7   | 2.0  | 1.4   | .3    |       |       |       |       |       | 4.4        | 10.4         |
| W                      |                      | 2.0  | 2.0  | 1.0   | .7    |       |       |       |       |       | 5.8        | 9.9          |
| WNW                    |                      | 1.0  | 2.4  | 1.0   | .3    |       |       |       |       |       | 4.8        | 9.9          |
| NW                     |                      |      | 1.4  | .7    |       |       |       |       |       |       | 2.0        | 10.7         |
| NNW                    |                      | .7   | 1.0  | 0.0   | .3    |       |       |       |       |       | 3.7        | 12.6         |
| VARIABLE               |                      |      |      |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////// |      |      |       |       |       |       |       |       |       | 18.0       | ////         |
| TOTALS                 | .7                   | 13.9 | 36.4 | 26.9  | 3.1   | 1.0   |       |       |       |       | 100.0      | 8.4          |

TOTAL NUMBER OF OBSERVATIONS: 274

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 279950 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: APR HOURS(IST): 0300-0500

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |      |      |       |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                  | 4-6  | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56 |            |              |
| N                      |                      | 1.7  | 2.4  | .3    |       |       |       |       |       |       |       | 4.4        | 8.3          |
| NNE                    |                      | .7   | .7   | 2.4   | .3    |       |       |       |       |       |       | 4.1        | 12.1         |
| NE                     |                      | .7   | .7   | 2.0   |       |       |       |       |       |       |       | 3.1        | 11.8         |
| ENE                    |                      |      | 3.7  | 1.7   |       |       |       |       |       |       |       | 5.4        | 10.0         |
| E                      |                      |      | 2.7  | .7    |       |       |       |       |       |       |       | 3.4        | 9.4          |
| ESE                    |                      | 1.4  | 1.4  | 1.0   |       |       |       |       |       |       |       | 3.7        | 9.1          |
| SE                     |                      | .3   | 5.1  | 2.4   |       |       | .3    |       |       |       |       | 8.1        | 10.9         |
| SSE                    |                      | .7   | 6.4  | 4.4   |       |       |       |       |       |       |       | 11.5       | 10.5         |
| S                      |                      | 1.7  | 2.4  | 4.1   | .3    |       |       |       |       |       |       | 7.8        | 11.0         |
| SSW                    |                      | .7   | 3.1  | 2.7   |       |       |       |       |       |       |       | 6.4        | 10.4         |
| SW                     |                      | .7   | .7   | 2.0   |       |       |       |       |       |       |       | 3.4        | 10.4         |
| WSW                    |                      | .7   | 1.0  | 2.0   | .3    |       |       |       |       |       |       | 3.7        | 11.4         |
| W                      |                      | 1.7  | .7   | 1.7   |       | .3    |       |       |       |       |       | 4.7        | 10.4         |
| WNW                    |                      | .7   | 1.4  | 2.4   |       |       |       |       |       |       |       | 4.4        | 11.2         |
| NW                     |                      | .3   | 1.4  | 1.7   | .3    |       |       |       |       |       |       | 3.7        | 11.4         |
| NNW                    |                      | .7   | .7   | 1.4   | .3    |       |       |       |       |       |       | 3.1        | 11.4         |
| VECTORED               |                      |      |      |       |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////// |      |      |       |       |       |       |       |       |       |       | 19.0       | ////         |
| TOTALS                 |                      | 11.1 | 34.2 | 31.9  | 1.7   | .3    | .3    |       |       |       |       | 100.0      | 8.6          |

TOTAL NUMBER OF OBSERVATIONS: 245

GLOBAL CLIMATOLOGY BRANCH  
USAF/ITAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275950 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 7A-87  
MONTH: APR HOURS (LST): 0600-0800

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |      |      |       |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                  | 4-6  | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | 56-66 |            |              |
| N                      |                      |      | 2.1  | 1.0   |       |       |       |       |       |       |       | 3.1        | 9.8          |
| NNE                    |                      | 1.7  | 1.0  | 1.4   | .7    |       |       |       |       |       |       | 4.2        | 12.0         |
| NEL                    |                      | .7   | 1.0  | 2.1   | .3    |       |       |       |       |       |       | 4.2        | 11.8         |
| ENE                    |                      | .7   | 2.1  | 1.4   | .3    |       |       |       |       |       |       | 4.2        | 10.8         |
| E                      |                      | 1.7  | 1.7  | 2.1   |       |       |       |       |       |       |       | 4.8        | 9.7          |
| ESE                    |                      | .7   | 2.8  | 1.4   |       |       |       |       |       |       |       | 4.5        | 10.2         |
| SE                     |                      | 1.7  | 5.2  | 3.8   |       |       | .3    |       |       |       |       | 10.4       | 10.9         |
| SSE                    |                      | 2.1  | 4.8  | 2.4   |       |       |       |       |       |       |       | 9.3        | 9.6          |
| S                      |                      | 1.7  | 2.4  | 4.2   | .3    |       |       |       |       |       |       | 9.0        | 11.1         |
| SSW                    |                      | .7   | 1.4  | 2.1   |       |       |       |       |       |       |       | 4.2        | 10.5         |
| SW                     |                      | .7   | 1.7  | 2.5   |       |       |       |       |       |       |       | 5.9        | 10.5         |
| WSW                    |                      | .7   | 1.0  | .3    | .3    |       |       |       |       |       |       | 2.4        | 9.9          |
| W                      |                      | 1.7  | 1.0  | 1.0   | .3    |       |       |       |       |       |       | 4.2        | 9.8          |
| WSW                    |                      | .7   | 1.7  | 2.4   |       |       |       |       |       |       |       | 4.5        | 11.5         |
| WNW                    |                      |      | .3   | 1.4   | .7    |       |       |       |       |       |       | 2.4        | 14.0         |
| NNW                    |                      | 1.7  | 2.1  | 2.4   |       |       |       |       |       |       |       | 6.6        | 10.0         |
| VARIABLE               |                      |      |      |       |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////// |      |      |       |       |       |       |       |       |       |       | 17.3       | ////         |
| TOTALS                 |                      | 13.4 | 32.4 | 37.2  | 3.1   |       | .7    |       |       |       |       | 100.0      | 8.9          |

TOTAL NUMBER OF OBSERVATIONS: 249

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275250 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: APR HOURS(IST): 0900-1100

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |      |       |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-7                  | 8-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56 |            |              |
| N                      |                      | 1.7  | 1.7   | 3.1   | .3    |       |       |       |       |       | 4.9        | 11.5         |
| NNE                    |                      | 1.7  | 1.0   | 1.7   | .7    |       |       |       |       |       | 4.2        | 11.8         |
| NE                     |                      |      | 2.4   | 3.1   |       |       |       |       |       |       | 4.5        | 11.4         |
| ENE                    |                      | 1.7  | 1.4   | .7    | .7    |       |       |       |       |       | 2.8        | 11.1         |
| E                      |                      | 1.7  | .7    | 3.1   |       |       |       |       |       |       | 3.5        | 10.6         |
| ESE                    |                      | 1.7  | 1.0   | 1.0   |       |       |       |       |       |       | 2.8        | 9.0          |
| SE                     |                      | 1.7  | 2.4   | 2.4   | .3    |       |       |       |       |       | 7.3        | 10.2         |
| SSE                    |                      | 2.4  | 2.4   | 3.1   | .3    |       |       |       |       |       | 9.1        | 10.1         |
| S                      |                      | 1.7  | 2.4   | 3.4   | .3    |       |       |       |       |       | 14.0       | 12.0         |
| SSW                    |                      | 1.7  | .7    | 3.1   |       |       |       |       |       |       | 4.9        | 11.0         |
| SW                     |                      |      | 2.4   | 3.4   |       |       |       |       |       |       | 5.2        | 10.9         |
| WSW                    |                      | 1.4  | 1.4   | 3.4   | .3    | .3    |       |       |       |       | 5.2        | 11.9         |
| W                      |                      | 1.7  | 2.1   | 2.4   | .3    |       |       |       |       |       | 5.2        | 11.1         |
| WSW                    |                      |      | .7    | 3.4   | .3    |       |       |       |       |       | 3.5        | 12.7         |
| W                      |                      | 1.7  |       | 1.7   | .7    |       |       |       |       |       | 3.5        | 12.4         |
| WNW                    |                      |      | 1.0   | 3.0   | .3    |       |       |       |       |       | 4.2        | 11.9         |
| VARIABLE               |                      |      |       |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////// |      |       |       |       |       |       |       |       |       | 14.3       | ////         |
| TOTALS                 |                      | 17.7 | 23.8  | 43.7  | 4.2   | .7    |       |       |       |       | 100.0      | 9.6          |

TOTAL NUMBER OF OBSERVATIONS: 286

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MPC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275950 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 7A-87  
MONTH: APR HOURS(LST): 1200-1400

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |     |      |       |       |       |       |       |       |       | TOTAL<br>Σ | MEAN<br>WIND |
|------------------------|----------------------|-----|------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                  | 4-6 | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56      |              |
| N                      |                      |     | 1.4  | 1.0   |       |       |       |       |       |       | 2.4        | 10.6         |
| NNE                    |                      | .7  | .7   | 4.1   | 1.0   |       |       |       |       |       | 6.1        | 13.8         |
| NE                     |                      |     | 2.0  | .7    |       |       |       |       |       |       | 2.7        | 9.5          |
| NNE                    |                      | .7  | .7   | 2.4   | .3    | .3    |       |       |       |       | 4.1        | 14.0         |
| E                      |                      | .3  | .7   | 1.0   |       |       |       |       |       |       | 2.0        | 11.3         |
| ESE                    |                      | .7  | 1.0  | 1.4   | .3    |       |       |       |       |       | 3.4        | 10.7         |
| SE                     |                      |     | 2.0  | 2.4   |       |       |       |       |       |       | 4.4        | 11.2         |
| SE                     |                      | 1.7 | 3.1  | 4.8   | .7    | .3    |       |       |       |       | 9.9        | 12.2         |
| S                      |                      | .7  | 4.4  | 7.5   | 1.0   | 1.0   |       |       |       |       | 14.6       | 12.9         |
| SSW                    |                      | .7  | 1.7  | 4.4   | .7    |       |       | .3    |       |       | 7.5        | 13.7         |
| SW                     |                      | .3  | .3   | 2.4   | .3    | .7    |       |       |       |       | 4.1        | 15.3         |
| WSW                    |                      |     | 2.4  | 3.4   |       | .3    |       |       |       |       | 6.1        | 12.2         |
| W                      |                      | .7  | 2.4  | 5.8   |       | .3    |       |       |       |       | 8.8        | 12.9         |
| WSW                    |                      | .7  | 1.0  | 1.4   | .7    |       |       |       |       |       | 3.4        | 13.0         |
| W                      |                      |     | .7   | 2.0   | 1.0   |       |       | .7    |       |       | 4.1        | 16.2         |
| WSW                    |                      | .7  | 1.4  | 1.7   | 1.4   |       |       |       |       |       | 5.1        | 12.1         |
| UNAVAILABLE            |                      |     |      |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////// |     |      |       |       |       |       |       |       |       | 11.2       | ////         |
| TOTALS                 |                      | 7.4 | 25.9 | 46.3  | 7.5   | 3.1   |       | .7    |       |       | 100.0      | 11.4         |

TOTAL NUMBER OF OBSERVATIONS: 244

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275250 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: APR HOURS(IST): 1500-1700

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS |     |      |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|---------------------|-----|------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                 | 4-6 | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56      |              |
| N                      |                     | .7  | 2.0  | 2.4   | .7    |       |       |       |       |       | 5.5        | 12.1         |
| NNE                    |                     | .7  | 1.4  | 2.7   | .3    | .3    |       |       |       |       | 5.1        | 13.2         |
| NE                     |                     | .7  | 1.0  | 2.4   | .3    |       |       |       |       |       | 4.1        | 12.4         |
| ENE                    |                     | .7  | .7   | 2.0   | .7    |       |       |       |       |       | 4.1        | 12.3         |
| E                      |                     |     | .7   | .7    |       |       |       |       |       |       | 1.4        | 10.5         |
| ESE                    |                     |     | 1.0  | 2.4   |       |       |       |       |       |       | 3.4        | 12.2         |
| SE                     |                     | .7  | 2.4  | 2.0   |       | .3    |       |       |       |       | 5.1        | 11.5         |
| SSE                    |                     | .7  | 3.1  | 5.1   | 1.0   |       |       |       |       |       | 9.6        | 12.0         |
| S                      |                     | .7  | 2.0  | 5.9   | 2.4   | .3    |       |       |       |       | 14.0       | 14.3         |
| SSW                    |                     | .7  | 2.4  | 2.7   | .7    | .3    |       |       |       |       | 6.5        | 12.6         |
| SW                     |                     | .7  | 1.0  | 2.0   |       | .7    |       |       |       |       | 4.4        | 13.1         |
| WSW                    |                     | 1.4 | 1.0  | 4.3   | 1.7   | .3    |       |       |       |       | 8.9        | 13.2         |
| W                      |                     | .7  | 1.4  | 3.4   | .7    |       |       |       |       |       | 5.8        | 12.5         |
| WNW                    |                     | .7  | .3   | 2.4   | .7    |       |       |       |       |       | 4.9        | 14.4         |
| NW                     |                     |     | .3   | 2.4   | 1.0   |       |       |       |       |       | 3.8        | 15.0         |
| NNW                    |                     |     | 1.0  | 1.0   | .7    |       |       |       |       |       | 2.7        | 13.8         |
| VARIABLE               |                     |     |      |       |       |       |       |       |       |       |            |              |
| CALM                   |                     |     |      |       |       |       |       |       |       |       | 10.9       | ////         |
| TOTAL                  |                     | 5.1 | 21.8 | 45.6  | 10.9  | 2.4   |       |       |       |       | 100.0      | 11.6         |

TOTAL NUMBER OF OBSERVATIONS: 243

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 27595 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 70-87  
MONTH: APR HOURS/EST: 1800-2000

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |      |       |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-7                  | 8-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56 |            |              |
| L                      |                      |      | 1.4   | 2.0   |       |       |       |       |       |       | 3.4        | 11.8         |
| NNW                    |                      | 1.4  | 2.0   | 2.7   |       | .7    |       |       |       |       | 6.8        | 11.4         |
| N                      |                      | 2.0  | 1.7   | 1.4   |       |       |       |       |       |       | 5.1        | 8.7          |
| NNE                    |                      |      | .7    | 1.7   | .3    |       |       |       |       |       | 2.7        | 13.4         |
| E                      |                      | 1.4  | .7    | 1.4   | .3    |       |       |       |       |       | 3.4        | 10.5         |
| ESE                    |                      | .7   | 2.7   | 1.0   |       |       |       |       |       |       | 4.1        | 9.3          |
| SE                     |                      | 1.7  | 2.7   | 0.0   |       |       |       |       |       |       | 4.5        | 9.7          |
| SSE                    |                      | 2.4  | 4.1   | 4.8   |       |       |       |       |       |       | 10.2       | 10.4         |
| S                      |                      | 2.4  | 2.4   | 5.5   | .7    | .3    |       |       |       |       | 11.3       | 11.4         |
| SSW                    |                      | 1.7  | 2.0   | 2.7   |       |       |       |       |       |       | 5.8        | 10.9         |
| SW                     |                      | .7   | 2.4   | 2.4   | .3    | .3    |       |       |       |       | 5.1        | 11.8         |
| WSW                    |                      |      | 1.7   | 0.4   | .7    |       |       |       |       |       | 4.8        | 12.9         |
| W                      |                      | 1.7  | 2.0   | 3.1   | .7    | .7    |       |       |       |       | 8.9        | 12.3         |
| WNW                    |                      | 1.7  | .7    | 0.0   |       |       |       |       |       |       | 2.4        | 11.0         |
| W                      |                      | .7   | .3    | 0.4   |       |       |       |       |       |       | 3.1        | 10.4         |
| WNW                    |                      | .7   | 1.0   | 1.0   | 1.4   |       |       |       |       |       | 3.8        | 12.7         |
| VARIES                 |                      |      |       |       |       |       |       |       |       |       |            |              |
| CALC                   | //////////////////// |      |       |       |       |       |       |       |       |       | 10.2       | ////         |
| TOTALS                 |                      | 14.7 | 20.7  | 40.0  | 4.1   | 1.7   |       |       |       |       | 100.0      | 10.0         |

TOTAL NUMBER OF OBSERVATIONS: 243

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 273955 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 79-87  
MONTH: APR HOURS (LST): 2100-2300

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |      |      |       |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                  | 4-6  | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-53 | GE 56 |            |              |
| N                      |                      | 1.4  | 1.4  | 2.0   |       |       |       |       |       |       |       | 4.8        | 9.9          |
| NNE                    |                      |      | 2.7  | 1.4   | .3    |       |       |       |       |       |       | 4.4        | 11.2         |
| NE                     |                      | .7   | 1.7  | 1.0   |       |       |       |       |       |       |       | 3.4        | 10.2         |
| ENE                    |                      | .7   | 1.0  | 1.7   |       |       |       |       |       |       |       | 4.4        | 9.5          |
| E                      |                      |      | 1.7  | .3    |       |       |       |       |       |       |       | 2.0        | 9.0          |
| ESE                    |                      | .7   | 4.6  | 1.7   |       | .3    |       |       |       |       |       | 7.5        | 10.1         |
| SE                     |                      | 1.7  | 2.7  | 1.4   |       |       |       |       |       |       |       | 5.8        | 9.5          |
| SSE                    |                      | 2.7  | 3.4  | 4.1   |       |       |       |       |       |       |       | 9.2        | 10.3         |
| S                      |                      | 1.4  | 3.7  | 6.1   |       | .3    |       |       |       |       |       | 11.6       | 11.5         |
| SSW                    | .7                   | 3.4  | 3.4  | 1.7   | .3    |       |       |       |       |       |       | 7.1        | 9.3          |
| SW                     |                      | 2.4  | 1.0  | 1.0   |       |       |       |       |       |       |       | 4.4        | 9.0          |
| WSW                    |                      | .7   | 1.7  | 0.3   | .3    | .7    |       |       |       |       |       | 5.4        | 10.3         |
| W                      |                      | 1.4  | 2.0  | 1.0   | .3    |       |       |       |       |       |       | 4.8        | 9.2          |
| WNW                    |                      | .7   | 1.0  | 1.0   |       |       |       |       |       |       |       | 2.4        | 10.0         |
| W                      |                      | 1.7  | .7   | 2.4   |       |       |       |       |       |       |       | 4.1        | 10.7         |
| WNW                    |                      | .7   | .7   | 1.4   | .7    |       |       |       |       |       |       | 2.7        | 11.6         |
| VA-17-EE               |                      |      |      |       |       |       |       |       |       |       |       |            |              |
| CAD                    | //////////////////// |      |      |       |       |       |       |       |       |       |       | 16.0       | ////         |
| TOTAL                  | .7                   | 10.7 | 33.7 | 30.3  | 1.7   | 1.4   |       |       |       |       |       | 100.0      | 8.6          |

TOTAL NUMBER OF OBSERVATIONS: 254

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATION

STATION NUMBER: 275950 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 74-87  
MONTH: APR HOURS(LEST): ALL

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS |      |      |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|---------------------|------|------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                 | 4-6  | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56      |              |
| N                      |                     | .7   | 1.6  | 1.6   | .1    |       |       |       |       |       | 3.9        | 10.5         |
| NNE                    |                     | .7   | 1.4  | 2.3   | .4    | .1    |       |       |       |       | 5.0        | 11.9         |
| NE                     | .7                  | .6   | 1.5  | 1.7   | .1    |       |       |       |       |       | 3.9        | 10.8         |
| NNE                    |                     | .4   | 1.5  | 1.5   | .2    | .0    |       |       |       |       | 3.7        | 11.2         |
| E                      |                     | .5   | 1.5  | 1.2   | .0    | .0    |       |       |       |       | 3.3        | 10.2         |
| ESE                    |                     | .7   | 2.2  | 1.4   | .0    | .1    |       |       |       |       | 4.3        | 10.2         |
| SE                     |                     | .9   | 2.5  | 2.4   | .1    | .0    | .1    |       |       |       | 7.0        | 10.5         |
| SSE                    |                     | 1.5  | 3.9  | 4.0   | .2    | .1    |       |       |       |       | 9.7        | 10.7         |
| S                      | .7                  | 1.3  | 2.8  | 6.1   | .7    | .3    |       |       |       |       | 11.2       | 12.0         |
| SSW                    | .7                  | .8   | 2.1  | 2.7   | .2    | .0    |       | .7    |       |       | 6.0        | 11.2         |
| SW                     |                     | .5   | 1.5  | 2.2   | .1    | .3    |       |       |       |       | 4.8        | 11.3         |
| WSW                    |                     | .6   | 1.5  | 2.4   | .5    | .0    |       |       |       |       | 5.2        | 12.1         |
| W                      |                     | 1.7  | 1.7  | 2.7   | .3    | .1    |       |       |       |       | 6.0        | 11.3         |
| WNW                    |                     | .7   | 1.2  | 2.7   | .3    |       |       |       |       |       | 3.9        | 11.8         |
| W                      |                     | .7   | .6   | 1.8   | .5    |       |       | .7    |       |       | 3.3        | 12.9         |
| WNW                    |                     | .7   | 1.1  | 1.8   | .5    |       |       |       |       |       | 4.0        | 11.8         |
| VARIABLE               |                     |      |      |       |       |       |       |       |       |       |            |              |
| CALC                   |                     |      |      |       |       |       |       |       |       |       | 14.6       | ////         |
| TOTALS                 | .1                  | 11.4 | 29.6 | 37.8  | 4.5   | 1.3   | .1    | .1    |       |       | 100.0      | 9.6          |

TOTAL NUMBER OF OBSERVATIONS: 2738

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275957 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: MAY HOURS (LST): 0000-0200

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |      |      |       |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                  | 4-6  | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56 |            |              |
| N                      |                      | 1.7  | 2.3  | 3.0   | .7    |       |       |       |       |       |       | 9.2        | 10.6         |
| NNE                    |                      | .7   | 1.6  | 1.0   |       |       |       |       |       |       |       | 3.0        | 10.4         |
| NE                     |                      | 1.0  | 1.0  | 1.6   | .3    |       |       |       |       |       |       | 4.9        | 9.5          |
| NNE                    |                      | 1.0  | 1.3  | .3    |       |       |       |       |       |       |       | 2.6        | 8.8          |
| E                      |                      | 1.7  | 1.3  | 1.6   |       |       |       |       |       |       |       | 4.2        | 8.6          |
| ESE                    |                      | 1.7  | 1.6  | 1.6   |       |       |       |       |       |       |       | 4.6        | 9.1          |
| SE                     |                      | 1.7  | 2.0  | 1.6   |       |       |       |       |       |       |       | 4.9        | 9.7          |
| ESE                    |                      | 1.0  | 2.0  | .7    |       |       |       |       |       |       |       | 3.6        | 8.4          |
| S                      |                      | 1.6  | 1.6  | 2.0   |       |       |       |       |       |       |       | 5.3        | 9.5          |
| SSW                    |                      | .7   | 2.6  | 1.3   |       |       |       |       |       |       |       | 4.6        | 9.7          |
| SW                     |                      | 1.6  | 1.3  | .3    | .3    |       |       |       |       |       |       | 3.6        | 8.9          |
| WSW                    |                      | 1.7  | 2.6  |       |       |       |       |       |       |       |       | 3.9        | 8.0          |
| W                      |                      | 1.7  | 1.6  | 1.3   |       |       |       |       |       |       |       | 4.3        | 9.1          |
| WNW                    |                      | 1.0  | .7   | 1.3   |       |       |       |       |       |       |       | 3.0        | 10.0         |
| W                      |                      | 1.0  | 1.3  | 1.3   |       |       |       |       |       |       |       | 3.6        | 9.8          |
| WNW                    |                      | 1.7  | 2.0  | 2.6   |       | .7    |       |       |       |       |       | 6.2        | 10.9         |
| VARIABLE               |                      |      |      |       |       |       |       |       |       |       |       |            |              |
| CLLH                   | //////////////////// |      |      |       |       |       |       |       |       |       |       | 24.3       | ////         |
| TOTALS                 |                      | 10.4 | 20.9 | 20.7  | 1.3   | .3    |       |       |       |       |       | 100.0      | 7.2          |

TOTAL NUMBER OF OBSERVATIONS: 304

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/HAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275957 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: MAY HOURS (LST): 0300-0500

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |      |      |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|------|------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                  | 4-6  | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | 56-59      |              |
| N                      |                      | 1.7  | 1.3  | 1.9   | .3    |       |       |       |       |       | 10.8       | 9.8          |
| NNE                    |                      | .7   | 2.3  | .7    | .7    |       |       |       |       |       | 4.3        | 10.9         |
| NE                     |                      | 1.7  | 1.6  | 1.3   |       |       |       |       |       |       | 3.9        | 9.7          |
| NNE                    |                      | .7   | 1.6  | 2.3   |       |       |       |       |       |       | 4.3        | 10.8         |
| E                      |                      | .7   | 2.6  | 1.3   |       |       |       |       |       |       | 4.3        | 9.5          |
| ESE                    |                      |      | 1.3  | 2.3   |       |       |       |       |       |       | 3.6        | 11.3         |
| SE                     |                      | .7   | 2.2  | .7    |       |       |       |       |       |       | 3.3        | 9.8          |
| ESE                    |                      | 1.7  | 3.0  | 2.3   |       |       |       |       |       |       | 6.2        | 9.8          |
| S                      |                      | 1.7  | 4.3  | 1.3   |       |       |       |       |       |       | 6.6        | 9.2          |
| SSW                    |                      |      | 2.6  | .7    |       |       |       |       |       |       | 3.3        | 10.0         |
| SW                     |                      | .7   | 1.6  | .3    |       |       |       |       |       |       | 2.6        | 8.3          |
| WSW                    |                      | 1.6  | .7   | .7    | .3    |       |       |       |       |       | 3.3        | 9.1          |
| W                      |                      | 1.7  | 2.0  | 1.3   |       |       |       |       |       |       | 5.2        | 10.4         |
| WNW                    |                      | 1.6  | .7   | .7    |       |       |       |       |       |       | 3.0        | 7.8          |
| W                      |                      | .7   | .3   | 1.3   |       |       |       |       |       |       | 2.0        | 11.3         |
| WNW                    |                      | 1.7  | 1.3  | 1.3   | .3    |       |       |       |       |       | 6.9        | 9.2          |
| VARIABLE               |                      |      |      |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////// |      |      |       |       |       |       |       |       |       | 26.6       | ////         |
| TOTALS                 |                      | 15.4 | 33.4 | 23.1  | 1.6   |       |       |       |       |       | 100.0      | 7.2          |

TOTAL NUMBER OF OBSERVATIONS: 205

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 27595 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: MAY HOURS (LST): 0600-0800

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |      |      |       |       |       |       |       |       |       | TOTAL<br>Σ | MEAN<br>WIND |
|------------------------|----------------------|------|------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                  | 4-6  | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56      |              |
| N                      |                      | 1.7  | 2.3  | 3.0   | .3    | .3    |       |       |       |       | 7.3        | 10.8         |
| NNE                    |                      | .7   | 3.7  | 1.7   | .3    |       |       |       |       |       | 5.6        | 11.7         |
| NE                     |                      | .7   | 1.3  | 1.7   |       |       |       |       |       |       | 3.6        | 10.5         |
| NNE                    |                      | .7   | 1.7  | 1.0   |       |       | .3    |       |       |       | 5.0        | 12.9         |
| E                      |                      | .7   | 1.0  | .3    |       |       |       |       |       |       | 2.0        | 8.7          |
| ESE                    |                      | 1.3  | 2.3  | .3    |       |       |       |       |       |       | 4.0        | 8.8          |
| SE                     |                      | .7   | 4.6  | 1.0   | .3    |       |       |       |       |       | 6.3        | 9.8          |
| SSE                    |                      | 1.7  | 2.3  | 2.0   |       |       |       |       |       |       | 6.0        | 9.3          |
| S                      |                      | 1.0  | 1.7  | 2.6   |       |       |       |       |       |       | 5.3        | 10.0         |
| SSW                    |                      | 1.0  | 2.6  | .7    |       |       |       |       |       |       | 4.3        | 8.5          |
| SW                     |                      |      | 1.7  |       | .3    |       |       |       |       |       | 2.7        | 9.8          |
| WSW                    |                      | .7   | 1.0  | .7    |       |       |       |       |       |       | 2.3        | 9.4          |
| W                      |                      | 1.7  | 3.0  | 3.0   |       |       |       |       |       |       | 7.3        | 9.9          |
| WNW                    |                      | .7   | 1.0  | 1.3   |       |       |       |       |       |       | 2.6        | 10.5         |
| NW                     |                      | .7   | 2.3  | 1.0   |       |       |       |       |       |       | 3.6        | 9.6          |
| NNW                    |                      | 1.7  | 4.0  | 3.0   |       |       |       |       |       |       | 9.3        | 10.2         |
| VARIABLE               |                      |      |      |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////// |      |      |       |       |       |       |       |       |       | 23.5       | ////         |
| TOTALS                 |                      | 10.0 | 36.1 | 25.5  | 1.3   | .3    | .3    |       |       |       | 100.0      | 7.7          |

TOTAL NUMBER OF OBSERVATIONS: 102

GLOBAL CLIMATOLOGY BRANCH  
USAFCTAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275957 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: MAY HOURS(IST): 0900-1100

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |      |      |       |       |       |       |       |       |       |       | TOTAL<br>Σ | MEAN<br>WIND |
|------------------------|----------------------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                  | 4-6  | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56 |            |              |
| N                      |                      | .7   | 1.0  | 5.6   | .7    |       |       |       |       |       |       | 7.9        | 13.3         |
| NNE                    |                      | 2.7  | .3   | 2.6   | .7    |       |       |       |       |       |       | 5.6        | 10.9         |
| NF                     |                      | .7   | 1.3  | 2.6   | .3    |       |       |       |       |       |       | 5.6        | 12.5         |
| ENE                    |                      |      | 2.0  | 1.3   |       |       |       |       |       |       |       | 4.3        | 10.3         |
| E                      |                      | .7   | 1.3  | 1.3   | .3    |       |       |       |       |       |       | 3.6        | 10.8         |
| ESE                    |                      |      | .3   | .7    |       |       |       |       |       |       |       | 1.0        | 12.0         |
| SE                     |                      | 1.0  | 2.3  | 1.0   |       |       |       |       |       |       |       | 4.9        | 9.9          |
| ESE                    |                      |      | 1.0  | 2.3   |       |       |       |       |       |       |       | 4.3        | 12.6         |
| S                      |                      | .3   | 2.6  | 2.0   |       |       |       |       |       |       |       | 5.9        | 11.1         |
| SSW                    |                      | 2.7  | 2.3  | 4.3   |       |       |       |       |       |       |       | 8.5        | 11.1         |
| SW                     |                      |      | 2.0  | 2.0   |       |       |       |       |       |       |       | 3.9        | 10.7         |
| WSW                    |                      | 1.0  | 2.0  | 1.0   |       |       |       |       |       |       |       | 3.9        | 9.5          |
| W                      |                      | .7   | 2.6  | 6.2   |       |       |       |       |       |       |       | 9.5        | 11.7         |
| WNW                    |                      | .7   | 1.3  | 1.3   |       | .7    |       |       |       |       |       | 3.6        | 12.1         |
| W                      |                      |      | 3.0  | 2.6   | .3    |       |       |       |       |       |       | 5.9        | 11.5         |
| NNW                    |                      | 1.0  | 3.3  | 4.3   |       |       |       |       |       |       |       | 8.5        | 10.9         |
| VARIABLE               |                      |      |      |       |       |       |       |       |       |       |       |            |              |
| CALC                   | //////////////////// |      |      |       |       |       |       |       |       |       |       | 13.1       | ////         |
| TOTALS                 |                      | 10.7 | 29.5 | 44.6  | 2.3   | .3    |       |       |       |       |       | 100.0      | 9.9          |

TOTAL NUMBER OF OBSERVATIONS: 706

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275953 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: MAY HOURS(UT): 1200-1400

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |     |      |       |       |       |       |       | TOTAL<br>Σ | MEAN<br>WIND |
|------------------------|----------------------|-----|------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                  | 4-6 | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 |            |              |
| N                      |                      | .7  | 1.3  | 6.3   | 1.0   | .3    |       |       | 9.6        | 13.3         |
| NNE                    |                      | .7  | 1.0  | 2.6   | 1.7   |       |       |       | 5.6        | 13.9         |
| NE                     |                      | .7  | 1.0  | 1.7   | .3    |       |       |       | 3.6        | 11.5         |
| NNE                    |                      |     | 1.3  | 1.3   |       |       |       |       | 2.6        | 11.0         |
| E                      |                      | .7  | 1.7  | 1.7   | .7    |       |       |       | 4.3        | 12.0         |
| ESE                    |                      | .3  | .3   | 1.0   | .7    |       |       |       | 2.3        | 12.9         |
| SE                     |                      | .7  | 1.0  | 1.0   |       |       |       |       | 2.3        | 10.3         |
| ESE                    |                      | .7  | 2.0  | 3.0   |       |       |       |       | 5.6        | 10.9         |
| S                      |                      | .7  | 1.7  | 6.0   | 1.0   |       |       |       | 9.3        | 13.0         |
| SSW                    |                      | .7  | .7   | 2.3   |       |       |       | .3    | 3.6        | 14.6         |
| SW                     |                      | 1.0 | .7   | 2.0   | .3    |       |       |       | 4.0        | 11.9         |
| WSW                    |                      | .7  | 1.7  | 3.3   | 1.0   | .3    |       |       | 6.6        | 13.0         |
| W                      |                      | .7  | 2.0  | 2.3   | .7    |       |       |       | 11.6       | 12.9         |
| WNW                    |                      | .3  | 1.0  | 4.0   | .7    |       |       |       | 6.0        | 13.1         |
| NW                     |                      | .3  | 2.3  | 4.3   |       | .3    |       |       | 7.3        | 12.0         |
| NNW                    |                      | .7  | 2.3  | 4.0   | .7    |       |       |       | 7.3        | 12.5         |
| VARIABLE               |                      |     |      |       |       |       |       |       |            |              |
| CALC                   | //////////////////// |     |      |       |       |       |       |       | 8.3        | ////         |
| TOTALS                 |                      | 2.7 | 21.9 | 50.6  | 8.6   | 1.0   |       | .7    | 100.0      | 11.6         |

TOTAL NUMBER OF OBSERVATIONS: 302

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MPC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275950 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 79-87  
MONTH: MAY HOURS(LST): 1500-1700

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |     |      |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|-----|------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                  | 4-6 | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56      |              |
| N                      |                      | 1.1 | 2.3  | 5.9   | 1.0   |       |       |       |       |       | 10.2       | 12.1         |
| NNE                    |                      |     | 1.2  | 4.6   | .7    |       |       |       |       |       | 6.6        | 13.1         |
| NE                     |                      | 1.0 |      | 2.0   | .7    |       |       |       |       |       | 3.6        | 12.7         |
| NNE                    |                      | .7  | .7   | 2.0   |       |       |       |       |       |       | 3.3        | 11.2         |
| E                      |                      | .7  | .3   | 2.3   |       | .3    |       |       |       |       | 3.3        | 13.1         |
| ESE                    |                      | .3  |      | 2.0   |       |       |       |       |       |       | 2.3        | 12.6         |
| SE                     |                      | .3  | .3   | 1.3   | .3    |       |       |       |       |       | 2.3        | 12.1         |
| ESE                    |                      | 1.0 | 1.0  | 2.3   |       |       |       |       |       |       | 4.3        | 10.9         |
| S                      |                      | .7  | .3   | 3.9   | 1.0   | .3    |       |       |       |       | 6.2        | 13.6         |
| SSW                    |                      |     | .7   | 3.9   | .3    |       | .3    |       |       |       | 5.3        | 14.4         |
| SW                     |                      | .7  | .3   | 1.3   |       | .3    |       |       |       |       | 2.3        | 13.0         |
| WSW                    |                      |     | 1.3  | 3.9   | .7    |       | .3    |       |       |       | 6.2        | 14.4         |
| W                      |                      | .7  | 1.3  | 3.2   | 1.6   | .3    |       |       |       |       | 12.2       | 13.6         |
| WNW                    |                      | .7  | 2.6  | 4.3   | .7    | .3    |       |       |       |       | 8.2        | 12.8         |
| NW                     |                      | .3  | .7   | 5.3   | .7    | .3    |       |       |       |       | 7.2        | 13.1         |
| NNW                    |                      | .7  | 3.0  | 3.9   | 1.0   |       |       |       |       |       | 8.2        | 12.3         |
| VARIABLE               |                      | .7  |      |       |       |       |       |       |       |       | .3         | 6.0          |
| CALM                   | //////////////////// |     |      |       |       |       |       |       |       |       | 7.9        | ////         |
| TOTALS                 |                      | 7.4 | 16.1 | 57.2  | 8.6   | 2.0   | .7    |       |       |       | 100.0      | 11.9         |

TOTAL NUMBER OF OBSERVATIONS: 304

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275950 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 79-87  
MONTH: MAY HOURS(IST): 1800-2000

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |     |      |       |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|-----|------|-------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                  | 4-6 | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56 |            |              |
| N                      |                      | .7  | 2.0  | 6.7   | 1.0   | .3    |       |       |       |       |       | 10.4       | 13.2         |
| NNE                    |                      | .7  | 3.7  | 0.7   | .7    |       |       |       |       |       |       | 8.4        | 11.6         |
| NE                     |                      | .7  | 2.0  | 0.0   | .3    |       |       |       |       |       |       | 4.7        | 11.2         |
| NNE                    |                      |     | .7   | .7    |       |       |       |       |       |       |       | 1.7        | 11.0         |
| E                      |                      | .7  | 2.4  | 1.3   |       |       |       |       |       |       |       | 4.4        | 10.0         |
| ESE                    |                      |     | .7   | 1.0   |       |       |       |       |       |       |       | 1.7        | 12.0         |
| SE                     |                      | .7  | .3   | 1.3   |       |       |       |       |       |       |       | 2.4        | 10.3         |
| SSE                    |                      | 1.0 | 2.4  | 1.7   |       |       |       |       |       |       |       | 5.1        | 9.6          |
| S                      |                      | 1.0 | 1.0  | 3.7   | .7    |       |       |       |       |       |       | 6.4        | 11.8         |
| SSW                    |                      | .7  | 1.7  | 0.4   |       |       |       |       |       |       |       | 5.4        | 11.8         |
| SW                     |                      | .7  | .3   | .7    | .3    |       |       |       |       |       |       | 1.7        | 11.4         |
| WSW                    |                      |     | 1.3  | 0.4   | .3    |       | .3    |       |       |       |       | 4.4        | 13.5         |
| W                      |                      | .7  | 0.4  | 0.4   | .3    |       |       |       |       |       |       | 11.4       | 11.9         |
| WNW                    |                      | 1.0 | 1.7  | 0.0   | .7    |       |       |       |       |       |       | 6.1        | 11.8         |
| WW                     |                      | 1.7 | 2.0  | 4.4   | 1.3   |       |       |       |       |       |       | 9.1        | 11.9         |
| NNW                    |                      | .7  | 1.7  | 0.4   | .3    | .3    |       |       |       |       |       | 5.7        | 12.7         |
| VARIABLE               |                      |     |      |       |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////// |     |      |       |       |       |       |       |       |       |       | 11.4       | ////         |
| TOTALS                 |                      | 1.1 | 26.6 | 45.3  | 6.1   | .7    | .3    |       |       |       |       | 100.0      | 10.5         |

TOTAL NUMBER OF OBSERVATIONS: 297

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/HIC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM FOURLY OBSERVATION

STATION NUMBER: 275957 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: MAY HOURS(UT): 2100-2300

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |      |      |       |       |       |       |       |       |       |    | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|------|------|-------|-------|-------|-------|-------|-------|-------|----|------------|--------------|
|                        | 1-3                  | 4-6  | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | 56 |            |              |
| N                      |                      | 1.0  | 4.3  | 7.0   |       |       |       |       |       |       |    | 7.2        | 9.6          |
| NNE                    |                      | 1.0  | 1.0  | 1.3   |       |       |       |       |       |       |    | 4.3        | 8.5          |
| NE                     |                      | 1.0  | 3.0  | 2.0   |       |       |       |       |       |       |    | 5.9        | 9.7          |
| NNE                    |                      | 2.6  | 1.6  | 1.0   | .3    |       |       |       |       |       |    | 5.0        | 8.6          |
| E                      |                      | 1.0  | 3.6  | .7    |       |       |       |       |       |       |    | 5.2        | 8.9          |
| ESE                    |                      | .3   | 2.3  | 2.0   |       |       |       |       |       |       |    | 4.6        | 10.1         |
| SE                     |                      | .7   | 1.6  | .3    |       |       |       |       |       |       |    | 2.6        | 8.8          |
| ESE                    |                      | 1.6  | 1.0  | 1.3   |       |       |       |       |       |       |    | 3.9        | 9.2          |
| S                      |                      | 1.0  | 3.6  | 3.0   |       |       |       |       |       |       |    | 7.5        | 10.0         |
| SSW                    |                      | 1.0  | 2.3  | .7    | .3    |       |       |       |       |       |    | 3.9        | 9.3          |
| SW                     |                      | .7   | 1.0  | 1.0   | .3    |       |       |       |       |       |    | 3.0        | 10.1         |
| WSW                    |                      | .7   | 2.0  | 1.0   |       |       |       |       |       |       |    | 3.3        | 9.6          |
| W                      |                      | 1.0  | 3.0  | 1.3   | .3    | .3    |       |       |       |       |    | 7.2        | 10.0         |
| WNW                    |                      | 1.0  | 1.3  | 1.0   |       |       |       |       |       |       |    | 3.9        | 8.7          |
| NW                     |                      | 1.0  | 1.3  | 1.3   |       | .3    |       |       |       |       |    | 4.6        | 10.1         |
| NNW                    |                      | 2.6  | .7   | 2.3   | .7    |       |       |       |       |       |    | 5.6        | 10.8         |
| VARIABLE               |                      |      |      |       |       |       |       |       |       |       |    |            |              |
| CALM                   | //////////////////// |      |      |       |       |       |       |       |       |       |    | 21.6       | ////         |
| TOTALS                 |                      | 10.7 | 33.4 | 21.6  | 2.0   | .7    |       |       |       |       |    | 100.7      | 7.5          |

TOTAL NUMBER OF OBSERVATIONS: 305

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275950 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 79-87  
MONTH: MAY HOURS(LST): ALL

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |      |      |       |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                  | 4-6  | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56 |            |              |
| N                      |                      | 1.7  | 2.4  | 4.7   | .6    | .1    |       |       |       |       |       | 9.1        | 11.6         |
| NNH                    |                      | .7   | 1.8  | 2.3   | .6    |       |       |       |       |       |       | 5.4        | 11.5         |
| NE                     |                      | .0   | 1.4  | 2.0   | .2    |       |       |       |       |       |       | 4.5        | 10.9         |
| ENE                    |                      | .6   | 1.5  | 1.4   | .0    |       | .0    |       |       |       |       | 3.6        | 10.6         |
| E                      |                      | .7   | 2.0  | 1.3   | .1    | .0    |       |       |       |       |       | 4.4        | 10.0         |
| ESE                    |                      | .6   | 1.1  | 1.4   | .1    |       |       |       |       |       |       | 3.0        | 10.6         |
| SE                     |                      | .6   | 1.8  | 1.1   | .1    |       |       |       |       |       |       | 3.6        | 10.0         |
| SSE                    |                      | .7   | 1.8  | 2.1   |       |       |       |       |       |       |       | 4.9        | 10.1         |
| S                      |                      | .6   | 2.1  | 2.2   | .3    | .0    |       |       |       |       |       | 6.5        | 11.1         |
| SSW                    |                      | .7   | 1.9  | 2.1   | .1    |       | .0    | .0    |       |       |       | 4.9        | 11.2         |
| SW                     |                      | .6   | 1.1  | .9    | .2    | .0    |       |       |       |       |       | 2.9        | 10.5         |
| WSW                    |                      | .7   | 1.6  | 1.6   | .3    | .0    | .1    |       |       |       |       | 4.2        | 11.4         |
| W                      |                      | 1.6  | 2.4  | 4.7   | .4    | .1    |       |       |       |       |       | 9.6        | 11.6         |
| WNW                    |                      | .7   | 1.2  | 2.1   | .0    | .1    |       |       |       |       |       | 4.5        | 11.4         |
| NW                     |                      | .7   | 1.7  | 2.7   | .3    | .1    |       |       |       |       |       | 5.4        | 11.5         |
| NNW                    |                      | 1.1  | 2.5  | 2.2   | .4    | .1    |       |       |       |       |       | 7.2        | 11.2         |
| VARIABLE               |                      |      |      |       |       |       |       |       |       |       |       | .0         | 6.0          |
| CALM                   | //////////////////// |      |      |       |       |       |       |       |       |       |       | 17.1       | ////         |
| TOTALS                 |                      | 17.1 | 28.7 | 36.7  | 4.0   | .7    | .2    | .0    |       |       |       | 100.0      | 9.2          |

TOTAL NUMBER OF OBSERVATIONS: 2424

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275950 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 79-87  
MONTH: JUN HOURS(UT): 0000-0200

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS                  |      |      |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|--------------------------------------|------|------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                                  | 4-6  | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56      |              |
| N                      |                                      | 1.0  | 1.7  | 1.3   | .7    |       |       |       |       |       | 5.7        | 10.2         |
| NNE                    |                                      | 2.0  | .7   | 1.3   |       |       |       |       |       |       | 4.0        | 9.0          |
| NE                     |                                      | .7   | 2.4  | .3    | .3    |       |       |       |       |       | 3.7        | 9.7          |
| ENE                    |                                      | 2.0  | 0.0  | 1.7   |       |       |       |       |       |       | 4.7        | 9.7          |
| E                      |                                      | 1.7  | 3.0  | 2.0   | .3    |       |       |       |       |       | 6.4        | 10.2         |
| ESE                    |                                      | 1.7  | 2.0  | 2.0   |       |       |       |       |       |       | 5.4        | 9.5          |
| SE                     |                                      | .7   | 3.0  | 1.3   |       |       |       |       |       |       | 5.1        | 9.7          |
| SSE                    |                                      | 1.7  | 2.0  | .7    |       |       |       |       |       |       | 4.0        | 8.3          |
| S                      |                                      | 1.7  | 2.0  | 1.0   | .3    |       |       |       |       |       | 5.1        | 9.3          |
| SSW                    |                                      | 1.7  | 1.3  | .7    | .3    |       |       |       |       |       | 3.4        | 9.5          |
| SW                     |                                      | 1.7  | .3   | 1.0   |       |       |       |       |       |       | 2.7        | 8.8          |
| WSW                    |                                      | 1.3  | 3.0  | 1.0   |       |       |       |       |       |       | 5.4        | 9.0          |
| W                      |                                      | 1.7  | 1.0  | .3    |       |       |       |       |       |       | 2.4        | 7.7          |
| WNW                    |                                      | .7   | 0.0  | 0.4   |       |       |       |       |       |       | 1.1        | 10.5         |
| WW                     |                                      | 1.7  | 3.7  | .7    |       |       |       |       |       |       | 5.7        | 8.6          |
| NNW                    |                                      | 1.7  | 2.0  | 1.0   | .3    |       |       |       |       |       | 6.4        | 10.8         |
| VARIABLE               |                                      |      |      |       |       |       |       |       |       |       |            |              |
| ONLY                   | //////////////////////////////////// |      |      |       |       |       |       |       |       |       | 24.9       | ////         |
| TOTALS                 |                                      | 14.6 | 30.3 | 20.9  | 2.4   |       |       |       |       |       | 100.0      | 7.2          |

TOTAL NUMBER OF OBSERVATIONS: 297

GLOBAL CLIMATOLOGY BRANCH  
USAF/ETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275950 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 7P-R7  
MONTH: JUN HOURS(IST): 0300-0500

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS |      |      |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|---------------------|------|------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                 | 4-6  | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-56 |            |              |
| N                      |                     | 1.4  | 2.7  | 1.0   | .3    |       |       |       |       |       | 7.5        | 8.5          |
| NNE                    |                     | 2.4  | 1.0  | 1.0   |       |       |       |       |       |       | 4.4        | 4.0          |
| NE                     |                     |      | 1.4  | 1.3   | .3    |       |       |       |       |       | 2.0        | 11.5         |
| NNE                    |                     | .7   | 2.0  | .3    |       |       |       |       |       |       | 2.7        | 9.0          |
| E                      |                     | .7   | 4.1  | 2.4   | .3    |       |       |       |       |       | 7.1        | 10.8         |
| ESE                    |                     | .7   | 4.1  | 1.0   |       |       |       |       |       |       | 5.8        | 8.9          |
| SE                     |                     | .7   | 2.7  | 1.0   |       |       |       |       |       |       | 3.1        | 10.4         |
| ESE                    |                     | 1.4  | 2.0  |       |       |       |       |       |       |       | 2.1        | 7.3          |
| S                      |                     | 2.4  | 3.4  | 2.4   |       |       |       |       |       |       | 7.8        | 9.3          |
| SSW                    |                     | 1.4  | .3   | .7    |       |       |       |       |       |       | 2.4        | 4.6          |
| SW                     |                     | 1.4  | 1.0  | .7    |       |       |       |       |       |       | 2.7        | 8.3          |
| SSW                    |                     | 2.7  | 2.7  | .3    |       |       |       |       |       |       | 5.8        | 7.6          |
| W                      |                     | 1.4  | 3.4  | .7    | .7    |       |       |       |       |       | 5.8        | 9.9          |
| WNW                    |                     | 1.4  | 1.4  | 1.0   |       |       |       |       |       |       | 4.1        | 5.3          |
| W                      |                     | .7   | 2.0  | 2.0   |       |       |       |       |       |       | 4.7        | 9.7          |
| WNW                    |                     | .7   | 2.1  | 3.1   | .7    |       |       |       |       |       | 7.1        | 11.6         |
| VARIABLE               |                     |      |      |       |       |       |       |       |       |       |            |              |
| CALM                   |                     |      |      |       |       |       |       |       |       |       | 24.1       | ////         |
| TOTALS                 |                     | 12.7 | 26.3 | 14.0  | 2.4   |       |       |       |       |       | 100.0      | 7.1          |

TOTAL NUMBER OF OBSERVATIONS: 245

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 27595 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: JUN HOURS(EST): 0600-0800

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |      |      |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|------|------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                  | 4-6  | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | 56-59      |              |
| N                      |                      | 1.4  | 2.7  | 7.7   | .7    |       |       |       |       |       | 3.4        | 10.9         |
| NNE                    |                      | 1.7  | 1.0  | 1.0   |       |       |       |       |       |       | 3.0        | 9.6          |
| NE                     |                      | .7   | 1.0  | 1.4   | .3    | .3    |       |       |       |       | 3.7        | 11.6         |
| ENE                    |                      | 1.0  | 1.7  | 1.4   |       |       |       |       |       |       | 4.1        | 9.5          |
| E                      |                      |      | 3.7  | 2.0   |       |       |       |       |       |       | 5.7        | 10.1         |
| ESE                    |                      | 1.7  | 4.1  | 1.0   |       |       |       |       |       |       | 6.1        | 9.7          |
| SE                     |                      | 1.7  | 1.0  | 1.4   |       |       |       |       |       |       | 4.1        | 8.3          |
| SSE                    |                      | 1.4  | 1.4  | 2.0   |       |       |       |       |       |       | 5.7        | 9.3          |
| S                      |                      | 1.7  | 2.0  | 1.0   | .3    |       |       |       |       |       | 4.4        | 9.3          |
| SSW                    |                      | .7   | 1.4  | .7    | .3    |       |       |       |       |       | 2.4        | 9.6          |
| SW                     |                      | 1.0  | 3.0  | .7    |       |       |       |       |       |       | 4.7        | 8.1          |
| WSW                    |                      | .7   | 1.0  | .7    |       |       |       |       |       |       | 2.4        | 8.6          |
| W                      |                      | 1.7  | 2.4  | 7.0   | .3    |       |       |       |       |       | 6.8        | 11.3         |
| WNW                    |                      | .7   | 2.0  | 1.4   |       |       |       |       |       |       | 4.1        | 9.8          |
| W                      |                      | .7   | 1.7  | 2.0   |       |       |       |       |       |       | 5.4        | 11.1         |
| WNW                    |                      | 1.0  | 7.0  | 2.4   | .7    |       |       |       |       |       | 7.1        | 10.4         |
| VARIABLE               |                      |      |      |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////// |      |      |       |       |       |       |       |       |       | 22.0       | ////         |
| TOTALS                 |                      | 10.0 | 33.1 | 26.4  | 2.4   | .3    |       |       |       |       | 100.0      | 7.8          |

TOTAL NUMBER OF OBSERVATIONS: 256

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275451 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: JUN HOURS(UT): 0900-1100

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |      |       |       |       |       |       |       |       |       |  | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|--|------------|--------------|
|                        | 1-7                  | 8-10 | 11-15 | 16-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | 56-66 |  |            |              |
| N                      |                      | 1.7  | 2.1   | 4.9   | 1.4   |       |       |       |       |       |  | 9.9        | 12.1         |
| NNE                    |                      | 1.7  | 1.0   | 1.7   |       |       |       |       |       |       |  | 3.8        | 10.4         |
| NE                     |                      | 1.7  | 1.4   | 1.7   | 1.3   |       |       |       |       |       |  | 4.1        | 10.6         |
| NNE                    |                      | 1.7  | 1.4   | 1.7   |       |       |       |       |       |       |  | 3.4        | 10.8         |
| E                      |                      | 1.7  | 2.7   | 1.7   | 1.3   |       |       |       |       |       |  | 4.8        | 9.4          |
| ESE                    |                      | 1.7  | 1.4   | 2.1   |       |       |       |       |       |       |  | 3.9        | 11.1         |
| SE                     |                      |      | 1.0   | 2.4   |       |       |       |       |       |       |  | 4.0        | 12.2         |
| ESE                    |                      | 1.7  | 3.1   | 2.1   |       |       |       |       |       |       |  | 5.9        | 10.4         |
| S                      |                      | 1.4  | 3.9   | 2.7   | 1.7   |       |       |       |       |       |  | 8.6        | 10.6         |
| SSW                    |                      | 1.7  | 1.7   | 3.2   |       |       |       |       |       |       |  | 5.9        | 12.1         |
| SW                     |                      | 1.7  | 1.7   | 1.7   |       |       |       |       |       |       |  | 3.1        | 10.9         |
| WSW                    |                      | 1.7  | 1.0   | 2.5   | 1.3   |       |       |       |       |       |  | 6.9        | 11.5         |
| W                      |                      | 1.7  | 3.4   | 4.1   |       | 1.7   |       |       |       |       |  | 8.2        | 11.3         |
| WNW                    |                      | 1.7  | 1.7   | 1.4   |       |       |       |       |       |       |  | 3.4        | 10.2         |
| W                      |                      | 1.7  | 1.4   | 3.8   | 1.0   |       |       |       |       |       |  | 6.9        | 12.6         |
| WNW                    |                      | 1.7  | 1.0   | 2.7   |       |       |       |       |       |       |  | 4.9        | 10.7         |
| VARIABLE               |                      |      |       |       |       |       |       |       |       |       |  |            |              |
| DATA                   | //////////////////// |      |       |       |       |       |       |       |       |       |  | 12.7       | ////         |
| TOTAL                  |                      | 1.7  | 24.8  | 40.5  | 4.1   | 1.7   |       |       |       |       |  | 100.0      | 7.8          |

TOTAL NUMBER OF OBSERVATIONS: 142

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275950 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 7P-#7  
MONTH: JUN. HOURS(UT): 1200-1400

| DIRECTION<br>(DEGREES) | 1-3        | 4-6        | 7-10       | 11-16      | 17-21      | 22-27      | 28-33      | 34-40      | 41-47      | 48-55      | 56-59      | TOTAL<br>% | MEAN<br>WIND |
|------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|--------------|
| N                      |            |            | 1.0        | 4.1        | 1.4        | .3         |            |            |            |            |            | 6.8        | 14.9         |
| NNE                    |            | .7         | .3         | 3.0        | .3         |            |            |            |            |            |            | 4.1        | 12.9         |
| NE                     |            | 1.0        | .7         | 1.0        |            |            |            |            |            |            |            | 2.7        | 9.3          |
| ENE                    |            | .7         | 1.7        | 1.4        | .3         |            |            |            |            |            |            | 3.7        | 10.6         |
| E                      |            | .7         | 2.0        | 1.4        |            |            |            |            |            |            |            | 3.7        | 10.5         |
| ESE                    |            | .7         | 1.0        | 2.0        | .7         |            |            |            |            |            |            | 4.1        | 12.0         |
| SE                     |            |            | 1.0        | 3.7        |            |            |            |            |            |            |            | 4.7        | 12.3         |
| SSE                    |            | 1.4        | 2.4        | 3.0        |            |            |            |            |            |            |            | 6.8        | 10.2         |
| S                      |            | .7         | 3.0        | 3.7        | .7         |            |            |            |            |            |            | 7.8        | 12.0         |
| SSW                    |            | .7         | 1.4        | 4.1        | 1.0        |            |            |            |            |            |            | 6.9        | 13.4         |
| SW                     |            |            | .7         | 1.4        | .3         |            |            |            |            |            |            | 2.4        | 13.0         |
| WSW                    |            | .7         | 3.0        | 3.0        | .7         |            |            |            |            |            |            | 7.1        | 11.6         |
| W                      |            | 1.0        | 2.0        | 6.4        | .7         |            |            |            |            |            |            | 10.1       | 12.1         |
| WSW                    |            | .7         | 3.4        | 4.7        |            |            |            |            |            |            |            | 8.8        | 11.2         |
| W                      |            | .7         | 1.4        | 2.7        | .3         | .3         |            |            |            |            |            | 5.1        | 12.5         |
| WNW                    |            |            | .3         | 3.7        | .3         | .7         |            |            |            |            |            | 6.8        | 14.2         |
| VARIABLE               |            |            |            |            |            |            |            |            |            |            |            |            |              |
| CALM                   | ////////// | ////////// | ////////// | ////////// | ////////// | ////////// | ////////// | ////////// | ////////// | ////////// | ////////// | 8.8        | ////         |
| TOTALS                 |            | 1.0        | 15.2       | 51.4       | 6.8        | 1.0        |            |            |            |            |            | 100.0      | 11.1         |

TOTAL NUMBER OF OBSERVATIONS: 296

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 27595 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: JUN, HOURS (LST): 1500-1700

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |     |      |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|-----|------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                  | 4-6 | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56      |              |
| N                      |                      |     | .7   | 4.1   | 2.7   | .7    |       |       |       |       | 8.2        | 15.5         |
| NNE                    |                      |     | .7   | 2.7   | .3    |       |       |       |       |       | 3.7        | 13.9         |
| NE                     |                      |     | .7   | 1.7   |       |       |       |       |       |       | 2.4        | 11.4         |
| ENE                    |                      | .7  | 1.4  | 1.4   |       |       |       |       |       |       | 3.1        | 10.9         |
| E                      |                      | .7  | 1.0  | 1.4   | .3    |       |       |       |       |       | 3.1        | 11.9         |
| ESE                    |                      | .7  |      | 2.7   |       |       | .3    |       |       |       | 3.7        | 13.9         |
| SE                     |                      |     | 1.7  | 1.4   |       |       |       |       |       |       | 3.1        | 10.4         |
| SSE                    |                      | 1.0 | 3.1  | 4.4   | .7    |       |       |       |       |       | 9.2        | 11.3         |
| S                      |                      | .3  | 1.4  | 4.4   | .3    |       | .3    |       |       |       | 6.8        | 13.2         |
| SSW                    |                      | 1.0 | 1.0  | 2.4   | .7    |       |       |       |       |       | 6.1        | 12.3         |
| SW                     |                      | .7  |      | 1.4   |       | .3    |       |       |       |       | 2.4        | 12.3         |
| WSW                    |                      |     | 1.0  | 3.1   |       |       |       |       |       |       | 4.1        | 12.8         |
| W                      |                      | 1.0 | 2.4  | 2.8   | 2.0   | .3    |       |       |       |       | 13.6       | 13.0         |
| WNW                    |                      | .7  | 3.1  | 3.7   | 1.0   |       |       |       |       |       | 8.2        | 12.5         |
| W                      |                      |     | 1.4  | 3.1   | .7    |       |       |       |       |       | 5.1        | 13.2         |
| NNW                    |                      | .7  | 1.0  | 1.4   | .7    |       |       |       |       |       | 2.8        | 13.0         |
| VARIABLE               |                      |     |      |       |       |       |       |       |       |       |            |              |
| CALC                   | //////////////////// |     |      |       |       |       |       |       |       |       | 9.5        | ////         |
| TOTAL                  |                      | 3.5 | 20.4 | 52.0  | 9.5   | 1.4   | .7    |       |       |       | 100.0      | 11.6         |

TOTAL NUMBER OF OBSERVATIONS: 294

GLOBAL CLIMATOLOGY BRANCH  
USAF/ETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275951 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: JUN HOURS(IST): 1800-2000

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |      |      |       |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                  | 4-6  | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56 |            |              |
| N                      |                      | 1.7  | 1.7  | 5.1   | 1.7   | .3    | .3    |       |       |       |       | 9.1        | 14.5         |
| NNE                    |                      | .7   | 1.0  | 1.7   |       |       |       |       |       |       |       | 3.0        | 11.1         |
| NE                     |                      | 1.7  | 1.0  | 1.3   |       |       |       |       |       |       |       | 3.4        | 10.0         |
| ENE                    |                      |      | .7   | .3    |       |       |       |       |       |       |       | 1.0        | 10.0         |
| E                      |                      | 1.0  | .3   | 1.7   |       |       |       |       |       |       |       | 3.0        | 9.8          |
| ESE                    |                      | 1.0  | 2.0  | 2.4   |       |       |       |       |       |       |       | 5.4        | 10.3         |
| SE                     |                      |      | 2.7  | 1.3   |       |       |       |       |       |       |       | 4.0        | 10.5         |
| SSE                    |                      | 1.7  | 2.7  | 3.4   |       |       |       |       |       |       |       | 7.7        | 9.9          |
| S                      |                      | 1.7  | 3.4  | 3.0   |       | .3    |       |       |       |       |       | 6.1        | 10.9         |
| SSW                    |                      | .7   | 1.7  | 2.7   | .3    | .3    |       |       |       |       |       | 5.7        | 12.7         |
| SW                     |                      | .7   | 1.3  | 1.0   |       |       |       |       |       |       |       | 3.0        | 9.6          |
| WSW                    |                      | .3   | .7   | 3.0   | 1.0   |       |       |       |       |       |       | 5.1        | 13.7         |
| W                      |                      | 1.7  | 4.4  | 4.7   |       |       |       |       |       |       |       | 10.4       | 10.4         |
| WNW                    |                      | .7   | 1.0  | 2.0   | 1.0   |       |       |       |       |       |       | 4.7        | 12.4         |
| WW                     |                      | .7   | 1.7  | 2.4   | .3    | .3    |       |       |       |       |       | 5.1        | 12.4         |
| NNW                    |                      | .7   | 2.7  | 3.1   | .3    |       |       |       |       |       |       | 10.4       | 12.2         |
| VARIABLE               |                      |      |      |       |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////// |      |      |       |       |       |       |       |       |       |       | 10.8       | ////         |
| TOTALS                 |                      | 11.7 | 27.9 | 47.1  | 4.7   | 1.3   | .3    |       |       |       |       | 100.0      | 10.3         |

TOTAL NUMBER OF OBSERVATIONS: 297

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATION

STATION NUMBER: 275950 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 7A-87  
MONTH: JUN HOURS(LST): 2100-2300

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |      |      |       |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                  | 4-6  | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56 |            |              |
| N                      |                      | 1.7  | 3.8  | 2.4   |       |       |       |       |       |       |       | 7.8        | 9.9          |
| NNE                    |                      | 1.4  | 1.0  | .7    |       |       |       |       |       |       |       | 3.1        | 9.1          |
| NE                     |                      | .7   | 1.0  |       |       |       |       |       |       |       |       | 1.7        | 7.6          |
| ENE                    |                      | 1.4  | 1.7  | .7    |       |       |       |       |       |       |       | 3.8        | 9.3          |
| E                      |                      | 1.7  | 2.0  | 2.0   |       |       |       |       |       |       |       | 5.1        | 10.3         |
| ESE                    |                      | .7   | .7   | .3    | .3    |       |       |       |       |       |       | 1.7        | 10.6         |
| SE                     |                      | 1.4  | 2.7  | 1.0   |       |       |       |       |       |       |       | 5.1        | 9.2          |
| SSE                    |                      | 1.7  | 3.8  | 1.7   |       |       |       |       |       |       |       | 6.5        | 8.7          |
| S                      |                      | .7   | 3.8  | 1.4   | .3    |       |       |       |       |       |       | 5.8        | 10.1         |
| SSW                    |                      | 2.7  | 1.7  |       |       |       |       |       |       |       |       | 4.4        | 6.8          |
| SW                     |                      | 2.7  | 1.4  |       | .7    |       |       |       |       |       |       | 4.1        | 8.5          |
| WSW                    |                      | 1.7  | 1.0  | .7    |       |       |       |       |       |       |       | 2.7        | 8.3          |
| W                      |                      | 3.1  | 1.4  | 1.7   |       |       |       |       |       |       |       | 5.1        | 8.7          |
| WNW                    |                      | 1.0  | 2.7  | 1.4   |       |       |       |       |       |       |       | 5.1        | 9.2          |
| WW                     |                      | 1.0  | 3.1  | 1.7   | .3    | .7    |       |       |       |       |       | 6.5        | 10.5         |
| NNW                    |                      | .7   | 1.7  | 1.4   |       |       |       |       |       |       |       | 3.8        | 9.8          |
| VA-103LE               |                      |      |      |       |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////// |      |      |       |       |       |       |       |       |       |       | 26.6       | ////         |
| TOTALS                 |                      | 21.5 | 33.4 | 16.4  | 1.7   | .3    |       |       |       |       |       | 100.0      | 6.8          |

TOTAL NUMBER OF OBSERVATIONS: 273

GLOBAL CLIMATOLOGY BRANCH  
USAF/FLC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275950 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 7P-87  
MONTH: JUN HOURS(IST): ALL

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS |      |      |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|---------------------|------|------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                 | 4-6  | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 |            |              |
| N                      |                     | 1.7  | 2.0  | 7.3   | 1.1   | .2    | .0    |       | 7.9        | 12.1         |
| NNE                    |                     | 1.1  | .8   | 1.7   | .1    |       |       |       | 3.6        | 10.5         |
| NE                     |                     | .6   | 1.2  | 1.0   | .2    | .0    |       |       | 3.0        | 10.3         |
| ENE                    |                     | .6   | 1.6  | 1.1   | .0    |       |       |       | 3.3        | 10.0         |
| E                      |                     | .6   | 2.4  | 1.7   | .2    |       |       |       | 4.9        | 10.3         |
| ESE                    |                     | .7   | 1.9  | 1.7   | .1    |       | .0    |       | 4.5        | 10.5         |
| SE                     |                     | .6   | 1.9  | 1.8   |       |       |       |       | 4.2        | 10.4         |
| SSE                    |                     | 1.4  | 2.5  | 2.1   | .1    |       |       |       | 6.1        | 9.7          |
| S                      |                     | 1.1  | 2.8  | 2.5   | .3    | .0    | .0    |       | 6.8        | 10.7         |
| SSW                    |                     | 1.0  | 1.3  | 1.9   | .3    | .0    |       |       | 4.4        | 11.2         |
| SW                     |                     | .6   | 1.1  | 1.0   | .1    | .0    |       |       | 3.1        | 9.7          |
| WSW                    |                     | .0   | 1.7  | 0.0   | .3    |       |       |       | 4.9        | 10.6         |
| W                      |                     | 1.0  | 2.5  | 0.6   | .5    | .1    |       |       | 7.9        | 11.1         |
| WNW                    |                     | .8   | 2.2  | 0.2   | .3    |       |       |       | 5.4        | 10.8         |
| W                      |                     | .6   | 2.0  | 0.4   | .3    | .1    |       |       | 5.6        | 11.3         |
| WNW                    |                     | .7   | 1.9  | 3.9   | .3    | .0    |       |       | 6.8        | 11.8         |
| VARIABLE               |                     |      |      |       |       |       |       |       |            |              |
| CALM                   |                     | 13.6 | 24.8 | 33.9  | 4.2   | .5    | .1    |       | 17.4       | ////         |
| TOTALS                 |                     | 13.6 | 24.8 | 33.9  | 4.2   | .5    | .1    |       | 100.0      | 8.9          |

TOTAL NUMBER OF OBSERVATIONS: 2760

GLOBAL CLIMATOLOGY BRANCH  
USAF/TAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 27590 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: JUL HOURS(IST): 0000-0200

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS                  |      |       |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|--------------------------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-7                                  | 8-10 | 11-15 | 16-20 | 21-25 | 26-30 | 31-40 | 41-47 | 48-55 | GE 56 |            |              |
| N                      |                                      | 1.7  | 2.0   | 1.3   |       |       |       |       |       |       | 4.6        | 9.3          |
| NNE                    |                                      | 1.4  | 3.3   | .3    |       |       |       |       |       |       | 5.2        | 7.8          |
| NE                     |                                      | .7   | 2.6   | .3    |       |       |       |       |       |       | 3.6        | 5.7          |
| NNE                    | .7                                   | 1.7  | 2.3   | .7    | .3    |       |       |       |       |       | 4.9        | 9.3          |
| E                      |                                      | 1.7  | 1.6   | 1.3   |       |       |       |       |       |       | 3.9        | 9.3          |
| ESE                    |                                      |      | 2.0   | 1.3   |       |       |       |       |       |       | 3.3        | 10.0         |
| SE                     |                                      | .7   | 1.6   | .3    |       |       |       |       |       |       | 2.3        | 9.1          |
| SSE                    |                                      | 1.0  | 1.6   |       |       |       |       |       |       |       | 2.6        | 8.3          |
| S                      |                                      | 2.7  | 1.3   | .3    |       |       |       |       |       |       | 3.9        | 7.5          |
| SSW                    | .7                                   | .7   | 1.3   | .3    |       |       |       |       |       |       | 2.6        | 7.8          |
| SW                     |                                      | .7   | 1.0   | .7    |       |       |       |       |       |       | 2.3        | 6.9          |
| WSW                    |                                      | 2.7  | .7    | 1.0   |       |       |       |       |       |       | 3.6        | 8.0          |
| W                      |                                      | 1.7  | .3    | .7    | .3    | .3    |       |       |       |       | 3.9        | 9.3          |
| WNW                    |                                      | 1.7  | 1.3   | 1.6   |       |       |       |       |       |       | 3.9        | 9.5          |
| NW                     |                                      | 1.3  | 2.6   | 1.0   |       |       |       |       |       |       | 4.9        | 8.8          |
| NNW                    |                                      | 2.6  | 2.3   | 2.6   |       |       |       |       |       |       | 9.5        | 9.4          |
| VARIABLE               |                                      |      |       |       |       |       |       |       |       |       |            |              |
| CALC                   | //////////////////////////////////// |      |       |       |       |       |       |       |       |       | 35.7       | ////         |
| TOTALS                 | .7                                   | 11.7 | 27.9  | 17.8  | .7    | .3    |       |       |       |       | 100.0      | 5.7          |

TOTAL NUMBER OF OBSERVATIONS: 305

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 27595 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: JUL HOURS(IST): 0300-0500

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |      |      |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|------|------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                  | 4-6  | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56      |              |
| N                      |                      | 1.4  | 2.6  | .3    |       |       |       |       |       |       | 4.6        | 8.1          |
| NNE                    |                      | .7   | 2.6  | .3    |       |       |       |       |       |       | 3.6        | 8.4          |
| NE                     |                      | .7   | 2.6  | .7    |       |       |       |       |       |       | 3.9        | 8.8          |
| ENE                    |                      | .7   | 1.3  | 1.6   |       |       |       |       |       |       | 3.3        | 11.2         |
| E                      |                      | 1.3  | 2.0  | 1.3   |       |       |       |       |       |       | 4.6        | 9.1          |
| ESE                    |                      | 1.3  | 2.0  | .3    |       |       |       |       |       |       | 3.6        | 7.8          |
| SE                     |                      | .7   | 1.6  | .3    |       |       |       |       |       |       | 2.6        | 8.5          |
| SSE                    |                      | 1.4  | 2.3  | .7    |       |       |       |       |       |       | 4.6        | 8.0          |
| S                      |                      | 1.3  | 2.9  | .7    |       |       |       |       |       |       | 4.9        | 8.5          |
| SSW                    |                      | .7   | .3   |       |       |       |       |       |       |       | 1.0        | 6.7          |
| SW                     |                      | 2.7  | .3   | .7    |       |       |       |       |       |       | 2.9        | 8.2          |
| WSW                    |                      | .7   | .7   |       |       |       |       |       |       |       | 1.3        | 6.5          |
| W                      |                      | 2.6  | 1.3  | 1.6   | .3    |       |       |       |       |       | 5.9        | 8.8          |
| WNW                    |                      | .7   | 1.0  | 1.0   |       |       |       |       |       |       | 4.2        | 7.7          |
| NW                     |                      | 1.3  | 2.3  | 2.6   |       |       |       |       |       |       | 5.9        | 10.1         |
| NNW                    |                      | .7   | 2.3  | 1.3   |       |       |       |       |       |       | 5.9        | 8.9          |
| VARIABLE               |                      |      |      |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////// |      |      |       |       |       |       |       |       |       | 37.5       | ////         |
| TOTALS                 |                      | 25.4 | 25.0 | 13.4  | .3    |       |       |       |       |       | 107.0      | 5.4          |

TOTAL NUMBER OF OBSERVATIONS: 307

GLOBAL CLIMATOLOGY BRANCH  
USAF/CLTAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275250 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 79-87  
MONTH: JUL HOURS (LST): 0600-0800

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |      |      |       |       |       |       |       |       |       | TOTAL<br>Σ | MEAN<br>WIND |
|------------------------|----------------------|------|------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                  | 4-6  | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56      |              |
| N                      |                      | 2.0  | 3.0  | 1.3   | .3    |       |       |       |       |       | 6.6        | 9.1          |
| NNE                    |                      | .7   | 1.6  | 1.0   |       |       |       |       |       |       | 3.3        | 9.0          |
| NE                     |                      | .7   | 1.6  | 1.0   |       |       |       |       |       |       | 3.0        | 9.8          |
| NNE                    |                      | .7   | 2.0  | .7    |       |       |       |       |       |       | 3.0        | 9.3          |
| E                      |                      | .7   | 2.0  | 2.0   |       |       |       |       |       |       | 4.3        | 10.3         |
| ESE                    |                      | 1.0  | 1.6  | 1.0   |       |       |       |       |       |       | 3.6        | 8.7          |
| SE                     |                      | 1.7  | .7   | .7    |       |       |       |       |       |       | 2.6        | 8.5          |
| SSE                    |                      | 2.7  | 1.0  | 1.0   |       |       |       |       |       |       | 4.3        | 8.2          |
| S                      |                      | .7   | .7   | .3    |       |       |       |       |       |       | 1.6        | 9.2          |
| SSW                    |                      | .7   | 1.3  | .7    |       |       |       |       |       |       | 2.6        | 9.3          |
| SW                     |                      | 1.7  | 1.3  | .3    |       |       |       |       |       |       | 3.0        | 8.2          |
| WSW                    |                      |      | .7   | 1.0   |       |       |       |       |       |       | 1.6        | 11.2         |
| W                      |                      | 1.7  | 2.0  | 1.0   |       |       |       |       |       |       | 4.3        | 8.9          |
| WNW                    |                      | 1.7  | 1.3  | 1.0   |       |       |       |       |       |       | 5.3        | 9.9          |
| NW                     |                      | 1.7  | 2.3  | 1.0   | .7    |       |       |       |       |       | 6.7        | 9.2          |
| NNW                    |                      | 1.7  | 3.6  | 2.3   |       |       |       |       |       |       | 7.2        | 9.7          |
| VARIABLE               |                      |      |      |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////// |      |      |       |       |       |       |       |       |       | 36.8       | ////         |
| TOTALS                 |                      | 17.4 | 26.6 | 17.6  | 1.0   |       |       |       |       |       | 103.0      | 5.9          |

TOTAL NUMBER OF OBSERVATIONS: 704

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275957 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: JUL HOURS(UT): 0900-1100

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS |      |      |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|---------------------|------|------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                 | 4-6  | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | 56-66      |              |
| N                      | .7                  | .7   | 3.3  | 3.3   |       |       |       |       |       |       | 7.2        | 10.6         |
| NNE                    |                     |      | 1.0  | 2.0   |       |       |       |       |       |       | 2.9        | 12.0         |
| NE                     |                     | .7   | 1.3  | 2.0   |       |       | .3    |       |       |       | 4.2        | 11.6         |
| ENE                    |                     | .7   | 1.2  | .7    |       |       |       |       |       |       | 2.3        | 9.7          |
| E                      |                     | 1.7  | 1.0  | .7    |       |       |       |       |       |       | 2.9        | 9.1          |
| ESE                    |                     | 1.2  | 1.6  | 2.3   |       |       |       |       |       |       | 5.2        | 9.8          |
| SE                     |                     | 1.2  | 1.3  | .7    |       |       |       |       |       |       | 2.9        | 8.7          |
| SSE                    |                     | .7   | 1.3  | 1.3   |       |       |       |       |       |       | 3.3        | 10.2         |
| S                      |                     | 1.7  | 1.6  | 2.0   | .3    |       | .3    |       |       |       | 5.5        | 11.4         |
| SSW                    |                     | 1.7  | 2.6  | 1.3   |       |       |       |       |       |       | 4.9        | 9.2          |
| SW                     |                     | .7   | 2.0  | 1.3   |       |       |       |       |       |       | 3.9        | 9.3          |
| WSW                    |                     | .7   | 1.6  | 2.3   |       |       |       |       |       |       | 5.5        | 10.9         |
| W                      |                     | 1.7  | 2.3  | 1.3   |       |       |       |       |       |       | 4.6        | 9.4          |
| WNW                    |                     | 1.6  | 2.6  | 2.6   | .3    |       |       |       |       |       | 7.2        | 10.4         |
| W                      |                     | 1.7  | 3.6  | 2.6   | .3    |       |       |       |       |       | 8.8        | 10.9         |
| NNW                    |                     | 1.7  | 2.9  | 2.3   |       |       |       |       |       |       | 7.2        | 10.0         |
| VARIABLE               |                     |      |      |       |       |       |       |       |       |       |            |              |
| CALM                   |                     |      |      |       |       |       |       |       |       |       | 21.5       | ////         |
| TOTALS                 | .7                  | 14.7 | 32.2 | 37.3  | 1.0   |       | .7    |       |       |       | 100.0      | 8.1          |

TOTAL NUMBER OF OBSERVATIONS: 307

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

PERIOD OF RECORD: 78-87  
MONTH: JUL HOURS (LST): 1200-1400

TOTAL NUMBER OF OBSERVATIONS: 704

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275957 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: JUL HOURS(LST): 1500-1700

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |     |      |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|-----|------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                  | 4-6 | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56      |              |
| N                      |                      |     | .7   | 4.7   | .3    |       |       |       |       |       | 5.7        | 13.2         |
| NNW                    |                      | 1.7 | 1.7  | 1.7   | .3    |       |       |       |       |       | 5.0        | 10.1         |
| NNE                    |                      | 1.7 | .7   | 3.3   |       |       |       |       |       |       | 5.0        | 10.8         |
| E                      |                      |     | 1.0  | 2.0   |       |       |       |       |       |       | 3.0        | 12.0         |
| ESE                    |                      | .7  | 1.7  | 1.3   |       |       |       |       |       |       | 3.7        | 10.5         |
| E                      |                      | .7  | 1.7  | .7    |       |       |       |       |       |       | 2.7        | 9.5          |
| SE                     |                      |     | 2.7  | 2.0   | .3    |       |       |       |       |       | 5.0        | 10.9         |
| SSE                    |                      | .3  | 1.0  | 2.3   |       |       |       |       |       |       | 3.7        | 11.6         |
| S                      |                      |     | 1.7  | 1.7   | .3    |       |       |       |       |       | 3.7        | 11.7         |
| SSW                    |                      |     | 1.3  | 2.3   |       | .3    |       |       |       |       | 4.0        | 12.9         |
| SW                     |                      | 1.7 | .3   | 2.7   |       |       |       |       |       |       | 4.0        | 10.5         |
| WSW                    |                      | 1.7 | 1.7  | 7.7   | .7    |       |       |       |       |       | 7.0        | 11.5         |
| W                      |                      | .7  | 3.0  | 4.0   | .3    |       |       |       |       |       | 12.0       | 12.0         |
| WNW                    |                      | .7  | 3.0  | 3.7   | 1.0   |       |       |       |       |       | 8.0        | 12.2         |
| W                      |                      | .7  | 2.7  | 6.3   | .7    |       |       |       |       |       | 10.3       | 12.1         |
| WNW                    |                      | .7  | 1.7  | 4.0   | .3    |       |       |       |       |       | 6.3        | 13.0         |
| VARIABLE               |                      |     |      |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////// |     |      |       |       |       |       |       |       |       | 11.0       | ////         |
| TOTALS                 |                      | 5.7 | 26.3 | 50.0  | 4.3   | .3    |       |       |       |       | 100.0      | 10.4         |

TOTAL NUMBER OF OBSERVATIONS: 700

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275052 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 79-87  
MONTH: JUL HOURS (LST): 1800-2200

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS                  |     |      |       |       |       |       |       |       |       | TOTAL<br>Σ | MEAN<br>WIND |
|------------------------|--------------------------------------|-----|------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                                  | 4-6 | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56      |              |
| N                      |                                      | 1.7 | 2.0  | 5.9   |       |       |       |       |       |       | 9.6        | 11.5         |
| NNE                    |                                      | .7  | 1.3  | 1.7   |       |       |       |       |       |       | 3.6        | 10.2         |
| NE                     |                                      | 1.7 | 1.3  | 2.0   |       |       |       |       |       |       | 4.2        | 9.5          |
| ENE                    |                                      |     | .3   | 1.7   |       |       |       |       |       |       | 2.0        | 10.0         |
| E                      |                                      | .7  | 2.0  | 1.3   |       |       |       |       |       |       | 3.6        | 9.9          |
| ESE                    |                                      | .7  | 1.3  | 2.0   |       |       |       |       |       |       | 3.6        | 10.0         |
| SE                     |                                      |     | 1.7  | 1.7   |       |       |       |       |       |       | 3.3        | 10.8         |
| SSE                    |                                      | 1.0 | 1.3  | .7    |       |       |       |       |       |       | 3.0        | 9.7          |
| S                      |                                      | .3  | 1.3  | .3    | .3    |       |       |       |       |       | 2.3        | 10.1         |
| SSW                    |                                      | 1.7 | 1.7  | 1.0   |       |       |       |       |       |       | 4.3        | 9.9          |
| SW                     |                                      | .7  | 2.6  | 1.0   |       |       |       |       |       |       | 4.0        | 9.5          |
| WSW                    |                                      | 1.0 | 2.6  | 3.0   | .7    |       |       |       |       |       | 7.3        | 11.5         |
| W                      |                                      | .7  | 2.6  | 5.0   |       |       |       |       |       |       | 8.3        | 11.2         |
| WNW                    |                                      | 1.7 | 3.3  | 3.3   | .3    |       |       |       |       |       | 8.3        | 10.4         |
| NW                     |                                      | 1.7 | 2.3  | 3.3   | .7    |       |       |       |       |       | 6.3        | 11.2         |
| NNW                    |                                      | 1.7 | 3.3  | 5.3   | .3    |       |       |       |       |       | 10.6       | 10.9         |
| VARIABLE               |                                      |     |      |       |       |       |       |       |       |       |            |              |
| CAL"                   | //////////////////////////////////// |     |      |       |       |       |       |       |       |       | 16.5       | ////         |
| TOTALS                 |                                      | 1.7 | 31.0 | 39.0  | 2.3   |       |       |       |       |       | 100.0      | 8.9          |

TOTAL NUMBER OF OBSERVATIONS: 753

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 270900 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: JUL HOURS(UT): 2100-2300

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS                  |      |      |       |       |       |       |       |       |       | TOTAL<br>Σ | MEAN<br>WIND |
|------------------------|--------------------------------------|------|------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                                  | 4-6  | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-56 |            |              |
| N                      |                                      | 2.4  | 2.6  | 1.6   |       |       |       |       |       |       | 5.9        | 9.1          |
| NNE                    |                                      | 2.0  | 1.3  | .3    | .3    |       |       |       |       |       | 3.9        | 8.1          |
| NE                     |                                      | 1.7  | 2.0  | .3    |       |       |       |       |       |       | 3.6        | 8.2          |
| ENE                    |                                      | .7   | 2.0  | .7    |       |       |       |       |       |       | 3.4        | 8.9          |
| E                      |                                      | .7   | 2.0  | 1.3   |       |       |       |       |       |       | 3.6        | 10.2         |
| ESE                    |                                      | 2.0  | 1.0  | 1.3   | .7    |       |       |       |       |       | 5.6        | 9.9          |
| SE                     |                                      | 1.7  | .7   | .3    |       |       |       |       |       |       | 2.3        | 8.0          |
| SSE                    |                                      | .7   | 1.3  | .3    |       |       |       |       |       |       | 2.3        | 8.3          |
| S                      |                                      | 1.7  | 1.6  | .7    |       |       |       |       |       |       | 3.6        | 8.4          |
| SSE                    |                                      | 1.7  | .7   | .3    |       |       |       |       |       |       | 2.0        | 8.0          |
| SW                     |                                      | 2.0  | 1.3  | 1.0   |       |       |       |       |       |       | 4.2        | 8.0          |
| WSW                    |                                      | 1.7  | 1.0  | .7    |       |       |       |       |       |       | 3.3        | 4.0          |
| W                      |                                      | 2.0  | 2.0  | 1.6   | .3    |       |       |       |       |       | 5.9        | 9.8          |
| WNW                    |                                      | 2.7  | 2.9  | 1.3   |       |       |       |       |       |       | 6.6        | 9.9          |
| W                      |                                      | 1.7  | 3.3  | 1.0   | .3    |       |       |       |       |       | 5.9        | 9.5          |
| WNW                    |                                      | .7   | 2.6  | 2.0   |       |       |       |       |       |       | 5.2        | 9.6          |
| VARIABLE               |                                      |      |      |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////////////////////// |      |      |       |       |       |       |       |       |       | 32.7       | ////         |
| TOTALS                 |                                      | 12.4 | 25.8 | 14.7  | 1.6   |       |       |       |       |       | 107.0      | 6.0          |

TOTAL NUMBER OF OBSERVATIONS: 706

CLIMATIC DATA BRANCH      PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
 GSAFETAC  
 AIR WEATHER SERVICE/MAL      FROM HOURLY OBSERVATIONS

STATION NUMBER: 21551      STATION NAME: KAZAN USSR

PERIOD OF RECORD: 76-47  
 MONTH: JUL      HOURS(EST): ALL

| DIRECTION<br>(true) | WIND SPEED IN KNOTS  |      |       |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|---------------------|----------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                     | 1-7                  | 8-13 | 14-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 | 50-59 |            |              |
| 0                   |                      | 1.7  | 2.3   | 2.9   | 2.7   |       |       | 2.7   |       |       | 6.7        | 10.7         |
| 10                  |                      |      | 1.7   | 1.2   | 1.1   |       |       |       |       |       | 3.9        | 9.5          |
| 20                  |                      |      | 1.7   | 1.3   |       | 1.1   |       |       |       |       | 3.9        | 9.7          |
| 30                  |                      |      | 1.6   | 1.2   | 1.0   |       |       |       |       |       | 3.1        | 10.2         |
| 40                  |                      |      | 1.7   | 1.6   | 1.4   |       |       |       |       |       | 3.7        | 9.9          |
| 50                  |                      |      | 1.6   | 1.6   | 1.3   | 1.1   |       | 1.7   |       |       | 3.7        | 10.2         |
| 60                  |                      |      | 1.6   | 1.6   | 1.3   | 1.7   |       |       |       |       | 3.2        | 9.7          |
| 70                  |                      |      | 1.7   | 1.3   | 1.1   |       |       |       |       |       | 3.8        | 9.3          |
| 80                  |                      |      | 1.6   | 1.3   | 1.2   |       | 1.1   |       |       |       | 3.7        | 10.0         |
| 90                  |                      |      | 1.7   | 1.7   |       | 1.1   |       |       |       |       | 3.2        | 9.6          |
| 100                 |                      | 1.7  | 1.4   | 1.2   | 1.0   |       |       |       |       |       | 3.9        | 9.4          |
| 110                 |                      | 1.7  | 1.4   | 2.1   | 1.2   |       |       |       |       |       | 4.6        | 10.5         |
| 120                 |                      | 1.6  | 1.5   | 1.7   | 1.0   | 1.7   |       |       |       |       | 6.5        | 10.7         |
| 130                 |                      | 1.6  | 2.7   | 2.1   | 1.3   |       |       |       |       |       | 6.4        | 10.4         |
| 140                 |                      |      | 1.6   | 1.9   | 1.3   | 1.5   |       |       |       |       | 3.2        | 10.7         |
| 150                 |                      | 1.9  | 2.6   | 1.3   | 1.1   |       |       |       |       |       | 3.1        | 10.4         |
| 160-180             |                      |      |       |       |       |       |       |       |       |       |            |              |
| TOTAL               | //////////////////// |      |       |       |       |       |       |       |       |       | 29.2       | ////         |
| PERCENT             |                      | 10.7 | 11.3  | 14.7  | 14.5  | 1.1   | 1.1   | 1.1   |       |       | 100.0      | 7.6          |

PERCENTAGE OF CALM: 1.04

GLOBAL CLIMATOLOGY BRANCH  
USAF/ETAC  
AFD WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 270951 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: AUG HOURS(EST): 0000-0400

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |      |       |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-7                  | 8-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | 56-66 |            |              |
| N                      |                      | 2.0  | 1.0   | .7    |       |       |       |       |       |       | 5.6        | 6.8          |
| NE                     |                      | 1.6  | 1.0   |       |       |       |       |       |       |       | 2.6        | 7.3          |
| E                      |                      | .7   | 1.0   | 1.0   |       |       |       |       |       |       | 2.7        | 10.3         |
| ENE                    |                      | 1.7  | 1.0   | 1.3   |       |       |       |       |       |       | 3.9        | 9.3          |
| E                      |                      | 1.7  | 4.6   | .7    |       |       |       |       |       |       | 6.6        | 8.9          |
| ESE                    |                      |      | 1.7   | 1.0   | .3    |       |       |       |       |       | 2.9        | 11.5         |
| SE                     |                      | .7   | 2.3   | 2.0   | .7    |       |       |       |       |       | 5.2        | 11.2         |
| SSE                    |                      | 1.7  | 1.7   | 1.3   |       |       |       |       |       |       | 3.9        | 9.0          |
| S                      |                      | 1.7  | 1.3   | 1.3   |       |       |       |       |       |       | 3.4        | 9.8          |
| SSW                    |                      | 1.7  | 1.7   | .7    |       |       |       |       |       |       | 3.2        | 9.6          |
| SW                     |                      | .7   | 1.0   | 1.0   |       |       |       |       |       |       | 3.3        | 10.9         |
| WSW                    |                      | .7   | .7    | .3    |       |       |       |       |       |       | 1.6        | 9.2          |
| W                      |                      | 1.6  | 1.3   | 1.0   | .3    |       |       |       |       |       | 4.3        | 9.2          |
| WNW                    |                      | 1.7  | 2.0   | .7    |       |       |       |       |       |       | 4.6        | 7.6          |
| W                      |                      | 1.7  | 3.3   | 1.3   | .7    |       |       |       |       |       | 6.2        | 9.6          |
| WNW                    |                      | 2.0  | 4.3   | 1.6   |       |       |       |       |       |       | 8.5        | 8.5          |
| VARIABLE               |                      |      |       |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////// |      |       |       |       |       |       |       |       |       | 31.6       | ////         |
| TOTAL                  |                      | 11.7 | 24.5  | 17.7  | 1.7   | .7    |       |       |       |       | 100.0      | 6.2          |

TOTAL NUMBER OF OBSERVATIONS: 705

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275907 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 79-97  
MONTH: ALL HOURS: 0100-0500

| DIRECTION<br>(0-359) | WIND SPEED IN KNOTS  |      |      |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|----------------------|----------------------|------|------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                      | 1-3                  | 4-6  | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | 56         |              |
| N                    |                      | 1.4  | 2.3  | 1.0   |       |       |       |       |       |       | 6.9        | 7.8          |
| NNE                  |                      | 1.7  | 3.3  |       |       |       |       |       |       |       | 4.6        | 7.6          |
| NE                   |                      | .7   | 1.7  | 1.0   |       |       |       |       |       |       | 3.3        | 9.4          |
| NNE                  |                      | .7   | 1.3  | .7    | .3    |       |       |       |       |       | 3.0        | 10.6         |
| E                    |                      | 1.7  | 4.0  | .3    |       |       |       |       |       |       | 5.6        | 8.7          |
| ESE                  |                      | 1.7  | 3.6  | 2.0   |       |       |       |       |       |       | 6.6        | 9.5          |
| SE                   |                      | 1.7  | 2.0  | .3    | .3    |       |       |       |       |       | 4.0        | 9.3          |
| SSE                  |                      | .7   | 2.0  | 1.0   |       |       |       |       |       |       | 3.3        | 10.0         |
| S                    |                      |      | 1.7  | .7    |       |       |       |       |       |       | 2.3        | 10.0         |
| SSW                  |                      | .7   | .7   | 1.0   |       |       |       |       |       |       | 2.3        | 9.4          |
| SW                   |                      | 1.7  | 1.3  | 1.0   |       |       |       |       |       |       | 3.3        | 9.8          |
| WSW                  |                      | 1.7  | .7   | 1.0   |       |       |       |       |       |       | 2.6        | 9.5          |
| W                    |                      | .7   | 1.3  | 1.0   |       |       |       |       |       |       | 5.6        | 7.5          |
| WNW                  |                      | 1.0  | 2.6  | 1.7   |       |       |       |       |       |       | 5.3        | 9.8          |
| WW                   |                      | 1.7  | 2.3  | .7    | .7    |       |       |       |       |       | 5.3        | 9.3          |
| WNW                  |                      | 1.7  | 3.3  | 2.0   |       |       |       |       |       |       | 5.6        | 8.9          |
| VARIABLE             |                      |      |      |       |       |       |       |       |       |       |            |              |
| CALM                 | //////////////////// |      |      |       |       |       |       |       |       |       | 29.4       | ////         |
| TOTAL                |                      | 17.7 | 34.0 | 17.0  | 1.7   |       |       |       |       |       | 100.0      | 8.3          |

TOTAL NUMBER OF OBSERVATIONS: 702

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275950 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: AUG HOURS (LST): 0600-0800

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |      |      |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|------|------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                  | 4-6  | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56      |              |
| N                      |                      | 1.7  | 4.6  | 1.7   |       |       |       |       |       |       | 7.9        | 8.4          |
| NNE                    |                      | 1.7  | 1.7  | 1.7   |       |       |       |       |       |       | 2.6        | 9.8          |
| NE                     |                      | 1.7  | 1.7  | 1.7   |       |       |       |       |       |       | 3.6        | 8.7          |
| NNE                    |                      | 1.7  | 2.3  | 1.7   |       |       |       |       |       |       | 4.6        | 8.4          |
| E                      |                      | 1.7  | 2.6  | 1.7   |       |       |       |       |       |       | 5.3        | 9.3          |
| ESE                    |                      | 1.7  | 3.3  | 1.7   |       |       |       |       |       |       | 5.3        | 9.6          |
| SE                     |                      | 1.7  | 2.3  | 1.7   |       |       |       |       |       |       | 4.6        | 9.5          |
| ESE                    |                      | 1.7  | 2.3  | 2.3   |       |       |       |       |       |       | 5.9        | 9.8          |
| S                      |                      | 1.7  | 1.7  | 1.3   |       |       |       |       |       |       | 1.7        | 10.0         |
| SSW                    |                      | 1.7  | 1.7  | 1.7   |       |       | 1.7   |       |       |       | 4.7        | 11.9         |
| SW                     |                      | 1.7  | 1.7  | 1.7   |       |       |       |       |       |       | 2.6        | 8.9          |
| SSW                    |                      | 1.7  | 1.7  | 1.7   |       |       |       |       |       |       | 3.6        | 9.9          |
| W                      |                      | 2.6  | 1.7  | 1.7   |       |       |       |       |       |       | 5.9        | 8.6          |
| WSW                    |                      | 2.6  | 2.6  | 1.7   |       |       |       |       |       |       | 5.9        | 8.7          |
| W                      |                      | 1.7  | 1.7  | 1.7   | 1.3   |       |       |       |       |       | 5.7        | 10.5         |
| WNW                    |                      | 1.7  | 3.3  | 1.7   | 1.3   |       |       |       |       |       | 5.9        | 9.3          |
| VARIABLE               |                      |      |      |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////// |      |      |       |       |       |       |       |       |       | 26.4       | ////         |
| TOTAL                  |                      | 10.1 | 31.4 | 27.1  | 1.7   |       | 1.7   |       |       |       | 107.0      | 8.8          |

TOTAL NUMBER OF OBSERVATIONS: 323

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 279950 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 70-87  
MONTH: ALL HOURS (LST): 0900-1100

| DIRECTION<br>(DIRECTION) | WIND SPEED IN KNOTS  |      |      |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|--------------------------|----------------------|------|------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                          | 1-3                  | 4-6  | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56      |              |
| N                        |                      | .7   | 3.3  | 1.0   | .3    |       |       |       |       |       | 4.9        | 10.5         |
| NNE                      |                      | 1.4  | 2.3  | 2.0   |       |       |       |       |       |       | 5.9        | 9.3          |
| NE                       |                      | .7   | .7   | 1.0   |       |       |       |       |       |       | 1.6        | 11.2         |
| NNE                      |                      | 1.4  | 2.0  | .7    |       |       |       |       |       |       | 4.3        | 8.2          |
| E                        |                      | .7   | 3.6  | .7    | .3    |       |       |       |       |       | 5.2        | 10.1         |
| ESE                      |                      | .7   | .7   | 1.0   |       |       |       |       |       |       | 2.3        | 9.1          |
| SE                       |                      | .7   | .7   | 2.6   |       |       |       |       |       |       | 3.9        | 10.7         |
| SSE                      |                      | .7   | 2.0  | 2.6   | .3    |       |       |       |       |       | 5.2        | 11.6         |
| S                        |                      | .7   | 1.6  | 3.3   | .3    |       |       |       |       |       | 5.9        | 11.6         |
| SSW                      |                      | 1.4  | 1.3  | 2.3   |       |       |       |       |       |       | 4.6        | 10.7         |
| SW                       |                      |      | 1.6  | .7    |       |       |       |       |       |       | 2.3        | 10.0         |
| WSW                      |                      | 1.4  | 1.6  | 2.6   | .3    |       |       |       |       |       | 6.2        | 10.7         |
| W                        |                      | 1.4  | 3.3  | 3.6   | .7    |       |       |       |       |       | 8.2        | 11.2         |
| WNW                      |                      | 1.4  | 2.6  | 1.6   |       |       |       |       |       |       | 5.2        | 9.4          |
| W                        |                      | 1.4  | 1.6  | 3.9   | .7    |       |       |       |       |       | 7.5        | 11.3         |
| WNW                      |                      | 1.4  | 3.0  | 3.0   | .3    |       |       |       |       |       | 8.5        | 10.8         |
| VARIABLE                 |                      |      |      |       |       |       |       |       |       |       |            |              |
| CALM                     | //////////////////// |      |      |       |       |       |       |       |       |       | 18.0       | ////         |
| TOTALS                   |                      | 10.4 | 30.1 | 30.5  | 2.0   | 1.0   |       |       |       |       | 100.0      | 5.6          |

TOTAL NUMBER OF OBSERVATIONS: 705

GLOBAL CLIMATOLOGY BRANCH      PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
USAFETAC      FROM HOURLY OBSERVATIONS

STATION NUMBER: 475910 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: AUG HOURS (LST): 1200-1400

| WIND SPEED IN KNOTS    |          |          |          |          |          |          |          |          |          |          |          |            |              |
|------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|------------|--------------|
| DIRECTION<br>(DEGREES) | 1-3      | 4-6      | 7-10     | 11-16    | 17-21    | 22-27    | 28-33    | 34-40    | 41-47    | 48-55    | 56-66    | TOTAL<br>% | MEAN<br>WIND |
| N                      |          | .7       | 2.7      | 3.3      | .3       |          |          |          |          |          |          | 6.7        | 11.2         |
| NNE                    |          |          | 1.3      | 0.7      |          |          |          |          |          |          |          | 4.0        | 12.0         |
| NE                     |          | .7       | 1.0      | .7       |          |          |          |          |          |          |          | 2.0        | 9.7          |
| NNE                    |          |          | .7       | 0.3      |          |          |          |          |          |          |          | 3.7        | 11.1         |
| E                      |          | 1.7      | 2.0      | 1.3      | .3       |          |          |          |          |          |          | 4.7        | 10.5         |
| ESE                    |          | 0.3      | .3       | 1.7      |          |          |          |          |          |          |          | 4.3        | 9.9          |
| SE                     |          |          | 1.7      | 0.7      |          |          |          |          |          |          |          | 4.3        | 10.2         |
| SSE                    | .7       | .7       | 1.3      | 0.3      | .3       |          | .3       |          |          |          |          | 4.7        | 11.7         |
| S                      |          | .7       | 2.0      | 4.0      | 1.3      |          |          |          |          |          |          | 9.0        | 12.8         |
| SSW                    |          | .7       | 1.3      | 3.3      |          |          |          |          |          |          |          | 5.3        | 11.9         |
| SW                     |          |          | .3       | .7       |          |          |          |          |          |          |          | 1.0        | 10.7         |
| WSW                    |          | .7       | 0.0      | 3.0      | .3       |          |          |          |          |          |          | 6.0        | 11.5         |
| W                      |          |          | 3.0      | 0.7      | .7       | .3       |          |          |          |          |          | 11.7       | 13.2         |
| WNW                    |          |          | 0.3      | 0.3      | .3       |          |          |          |          |          |          | 6.0        | 10.5         |
| NW                     |          | 1.7      | 3.0      | 4.7      | .3       |          |          |          |          |          |          | 9.0        | 11.2         |
| NNW                    |          | .7       | 1.7      | 0.3      | 1.0      |          |          |          |          |          |          | 9.7        | 10.6         |
| VARIABLE               |          |          |          |          |          |          |          |          |          |          |          |            |              |
| CALL                   | //////// | //////// | //////// | //////// | //////// | //////// | //////// | //////// | //////// | //////// | //////// | 9.7        | ////         |
| TOTALS                 | .7       | 4.7      | 20.7     | 40.3     | 5.0      | .3       | .3       |          |          |          |          | 100.0      | 10.7         |

TOTAL NUMBER OF OBSERVATIONS: 366

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 27592 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: AUG HOURS(1ST): 1500-1700

| DIRECTION<br>(DEGREES) | 1-3                  | 4-6 | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | 56-66 | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|-----|------|-------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
| N                      |                      | .7  | 2.3  | 3.6   | .3    | .3    |       |       |       |       |       | 7.2        | 11.8         |
| NNE                    |                      | .7  | .7   | 1.7   | .3    |       |       |       |       |       |       | 3.0        | 12.1         |
| NE                     |                      |     | 1.0  | 2.0   |       |       |       |       |       |       |       | 3.0        | 11.3         |
| NNE                    |                      | .7  | 1.0  | 1.0   | .3    |       |       |       |       |       |       | 2.6        | 11.9         |
| E                      |                      | .7  | .3   | 1.0   |       |       |       |       |       |       |       | 1.7        | 10.0         |
| ESE                    |                      | .7  | 2.3  | 2.6   |       |       |       |       |       |       |       | 5.3        | 11.4         |
| SE                     |                      | .7  | 2.0  | 1.3   | .3    |       |       |       |       |       |       | 4.3        | 10.4         |
| ESE                    |                      | .3  | 2.0  | 2.0   | 1.0   |       |       |       |       |       |       | 5.3        | 11.8         |
| S                      |                      | 1.7 | 1.7  | 4.3   | 1.0   | .3    | .3    |       |       |       |       | 8.9        | 13.2         |
| SSW                    |                      |     | .3   | 2.0   |       |       |       |       |       |       |       | 2.3        | 12.9         |
| SW                     |                      | .7  | 1.0  | 1.3   |       |       |       |       |       |       |       | 2.6        | 11.0         |
| SSW                    |                      | .7  | 1.7  | 5.0   | .7    |       |       |       |       |       |       | 7.9        | 12.4         |
| W                      |                      | .7  | 3.0  | 6.9   |       | .3    | .3    |       |       |       |       | 11.2       | 12.9         |
| WSW                    |                      | .7  | 1.0  | 5.3   |       | .7    |       |       |       |       |       | 7.7        | 12.7         |
| W                      |                      | .7  | 2.3  | 5.0   | .3    |       |       |       |       |       |       | 8.3        | 12.0         |
| WSW                    |                      | .7  | 2.6  | 5.6   | 1.0   | .3    |       |       |       |       |       | 9.2        | 13.7         |
| VARIABLE               |                      |     |      |       |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////// |     |      |       |       |       |       |       |       |       |       | 2.9        | ////         |
| TOTAL                  |                      | 1.7 | 24.4 | 57.5  | 5.3   | 1.7   | .7    |       |       |       |       | 107.0      | 11.1         |

TOTAL NUMBER OF OBSERVATIONS: 703

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 27525 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 79-87  
MONTH: AUG HOURS (LST): 1900-2000

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |      |      |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|------|------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                  | 4-6  | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56      |              |
| N                      |                      | 1.6  | 3.6  | 3.0   |       |       |       |       |       |       | 8.2        | 10.0         |
| NNE                    |                      | 1.6  | .7   | 2.2   | .3    | .3    |       |       |       |       | 5.2        | 11.9         |
| NF                     |                      |      | .7   | .3    |       |       |       |       |       |       | 1.0        | 10.0         |
| ENE                    |                      | .7   | 1.6  | 3.0   |       |       |       |       |       |       | 4.9        | 11.2         |
| E                      |                      | .7   | 2.0  | 1.6   |       |       |       |       |       |       | 4.3        | 10.6         |
| ESE                    |                      | 1.7  | 1.6  | 1.0   | .3    |       |       |       |       |       | 4.3        | 9.2          |
| SE                     |                      | 1.3  | 1.3  | 1.0   |       |       |       |       |       |       | 3.6        | 8.9          |
| SSE                    |                      | 1.7  | 3.3  | 1.6   | 1.0   |       |       |       |       |       | 6.9        | 10.5         |
| S                      |                      | .7   | 2.0  | 3.0   |       |       |       |       |       |       | 5.2        | 11.5         |
| SSW                    |                      |      | .7   | 1.3   |       |       |       |       |       |       | 2.0        | 12.0         |
| SW                     |                      | .7   | 1.0  | 1.0   | .3    |       |       |       |       |       | 3.0        | 10.3         |
| WSW                    |                      | 1.7  | 2.6  | 2.0   | .7    |       |       |       |       |       | 7.2        | 9.8          |
| W                      |                      | 2.0  | 2.3  | 4.3   |       | .3    |       |       |       |       | 8.9        | 10.5         |
| WNW                    |                      | 1.7  | 2.6  | 3.7   | .3    |       |       |       |       |       | 8.9        | 11.0         |
| W                      |                      | 1.6  | 2.6  | 2.3   | .3    |       |       |       |       |       | 6.9        | 10.4         |
| NNW                    |                      | 1.7  | 1.6  | 4.3   |       |       |       |       |       |       | 6.9        | 11.3         |
| VARIABLE               |                      |      |      |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////// |      |      |       |       |       |       |       |       |       | 12.8       | ////         |
| TOTALS                 |                      | 10.4 | 31.1 | 35.7  | 3.3   | .7    |       |       |       |       | 100.0      | 9.2          |

TOTAL NUMBER OF OBSERVATIONS: 104

GLOBAL CLIMATOLOGY BRANCH  
USAF/CIAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275950 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: AUG HOURS(IST): 2100-2300

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |      |      |       |       |       |       |       |       |       |       | TOTAL<br>1 | MEAN<br>WIND |
|------------------------|----------------------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                  | 4-6  | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56 |            |              |
| N                      |                      | 0.7  | 2.2  | 1.0   |       |       |       |       |       |       |       | 5.6        | 9.5          |
| NNE                    |                      | 1.0  | 1.3  | 1.0   | .7    |       |       |       |       |       |       | 3.9        | 9.8          |
| NE                     |                      | .7   | 1.3  | .7    |       |       |       |       |       |       |       | 2.6        | 9.3          |
| ENE                    |                      | 1.7  | 1.0  | 1.0   |       |       |       |       |       |       |       | 3.3        | 5.6          |
| E                      |                      | 2.7  | 2.0  | 0.3   |       |       |       |       |       |       |       | 6.9        | 9.0          |
| ESE                    |                      | .7   | .7   | 1.3   |       |       |       |       |       |       |       | 2.3        | 10.6         |
| SE                     |                      | .7   | 2.3  | 1.0   | .3    |       |       |       |       |       |       | 4.3        | 10.4         |
| SSE                    |                      | 1.7  | 2.7  | .3    |       |       |       |       |       |       |       | 3.9        | 8.0          |
| S                      |                      | .7   | 1.6  | 1.3   |       |       |       |       |       |       |       | 3.6        | 9.5          |
| SSW                    |                      | 1.7  | 3.3  | 1.3   |       |       |       |       |       |       |       | 5.6        | 9.1          |
| SW                     |                      | .7   | 1.6  | .3    |       |       |       |       |       |       |       | 2.6        | 8.5          |
| WSW                    |                      | 1.6  | 1.3  | .7    | .3    |       |       |       |       |       |       | 4.2        | 8.2          |
| W                      |                      | 1.3  | 1.0  | 0.0   |       |       |       |       |       |       |       | 4.3        | 9.8          |
| WNW                    |                      | 1.6  | 1.7  | 1.3   |       |       |       |       |       |       |       | 4.7        | 9.1          |
| NW                     |                      | 1.3  | 1.3  | 1.3   | .3    |       |       |       |       |       |       | 5.3        | 8.9          |
| NNW                    |                      | 4.9  | 4.3  | 0.0   |       |       |       |       |       |       |       | 11.8       | 8.7          |
| VERIFABLE              |                      |      |      |       |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////// |      |      |       |       |       |       |       |       |       |       | 24.7       | ////         |
| TOTALS                 |                      | 25.7 | 29.9 | 19.4  | 1.6   |       |       |       |       |       |       | 107.0      | 6.8          |

TOTAL NUMBER OF OBSERVATIONS: 314

GLOBAL CLIMATOLOGY BRANCH  
USAF/CITAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 273957 STATION NAME: KAZAN, USSR

PERIOD OF RECORD: 78-87  
MONTH: ALL HOURS(UT): ALL

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |      |      |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|------|------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                  | 4-6  | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | 56-66      |              |
| N                      |                      | 1.3  | 2.8  | 1.8   | .1    | .0    |       |       |       |       | 6.6        | 9.4          |
| NNE                    |                      | 1.0  | 1.4  | 1.4   | .2    | .0    |       |       |       |       | 4.0        | 10.0         |
| NE                     |                      | .5   | 1.1  | .9    |       |       |       |       |       |       | 2.4        | 9.9          |
| ENE                    |                      | .0   | 1.4  | 1.3   | .1    |       |       |       |       |       | 3.7        | 9.8          |
| E                      |                      | 1.1  | 2.6  | 1.2   | .1    |       |       |       |       |       | 5.0        | 9.5          |
| ESE                    |                      | .9   | 1.7  | 1.6   | .1    |       |       |       |       |       | 4.2        | 9.9          |
| SE                     |                      | .9   | 1.8  | 1.5   | .1    | .0    |       |       |       |       | 4.3        | 10.4         |
| SSE                    |                      | .9   | 2.1  | 1.6   | .2    |       | .0    |       |       |       | 4.9        | 10.4         |
| S                      |                      | .9   | 1.6  | 2.3   | .3    | .0    | .0    |       |       |       | 4.9        | 11.7         |
| SSW                    |                      | .7   | 1.2  | 1.7   |       |       | .0    |       |       |       | 3.7        | 10.7         |
| SW                     |                      | .9   | 1.0  | .9    | .0    |       |       |       |       |       | 2.6        | 9.8          |
| WSW                    |                      | 1.7  | 1.4  | 1.9   | .2    | .0    |       |       |       |       | 4.9        | 10.4         |
| W                      |                      | 1.9  | 2.1  | 2.5   | .1    | .2    | .0    |       |       |       | 7.5        | 11.0         |
| WNW                    |                      | 1.0  | 2.2  | 2.4   | .1    | .0    |       |       |       |       | 5.9        | 10.3         |
| NW                     |                      | 1.4  | 2.3  | 2.6   | .4    |       |       |       |       |       | 6.7        | 10.6         |
| NNW                    |                      | 1.9  | 3.0  | 2.3   | .2    | .1    |       |       |       |       | 5.4        | 10.5         |
| VARIABLE               |                      |      |      |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////// |      |      |       |       |       |       |       |       |       | 20.3       | ////         |
| TOTALS                 |                      | 17.0 | 29.7 | 29.9  | 2.5   | .5    | .0    |       |       |       | 100.0      | 9.2          |

TOTAL NUMBER OF OBSERVATIONS: 2425

GLOBAL CLIMATOLOGY BRANCH  
USAF/ETAC  
AIP WEATHER SERVICE/MFL

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 27525 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 79-87  
MONTHS: SEP HOURS: 0100-0200

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |      |       |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-5                  | 6-10 | 11-15 | 16-20 | 21-25 | 26-30 | 31-35 | 36-40 | 41-45 | 46-50 |            |              |
| N                      |                      | 1.7  | 2.1   | .3    | .7    |       |       |       |       |       | 4.8        | 9.4          |
| NNE                    |                      | 1.0  | 1.7   | .7    |       |       |       |       |       |       | 3.4        | 9.0          |
| NE                     |                      | .7   | .7    | .7    | .3    |       |       |       |       |       | 2.1        | 10.8         |
| NNE                    |                      | .7   | 1.0   | 1.7   | .3    |       |       |       |       |       | 3.7        | 11.9         |
| E                      |                      | .7   | 3.4   | 1.4   | .3    |       |       |       |       |       | 5.8        | 9.6          |
| ESE                    |                      | 1.4  | 4.2   | 1.7   |       |       |       |       |       |       | 7.3        | 9.4          |
| SE                     |                      | .7   | 1.7   | .7    |       |       |       |       |       |       | 3.1        | 9.6          |
| SSE                    |                      |      | 2.1   | 2.1   |       |       |       |       |       |       | 4.2        | 11.7         |
| S                      |                      | 1.4  | 1.7   | 1.4   |       |       |       |       |       |       | 4.5        | 8.9          |
| SSE                    |                      | 2.1  | 3.5   | 1.0   |       | .7    | .3    |       |       |       | 7.3        | 10.9         |
| SW                     |                      | 1.1  | 2.8   | .3    |       |       |       |       |       |       | 4.2        | 7.2          |
| WSW                    |                      | .7   | 2.4   | 1.0   |       | .7    |       |       |       |       | 4.8        | 11.0         |
| W                      |                      | 2.1  | 2.4   | 2.4   | 1.0   |       |       |       |       |       | 8.7        | 10.8         |
| WNW                    |                      | 1.4  | 1.0   | 2.1   | .3    |       |       |       |       |       | 4.8        | 10.8         |
| W                      |                      | .7   | 1.7   | 3.4   | .7    |       |       |       |       |       | 6.5        | 11.6         |
| WNW                    |                      | 1.7  | 1.4   | 1.0   | .3    |       |       |       |       |       | 4.8        | 9.5          |
| VEARIABLES             |                      |      |       |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////// |      |       |       |       |       |       |       |       |       | 18.5       | ////         |
| TOTALS                 |                      | 19.0 | 34.6  | 20.7  | 3.8   | .7    | .7    | .3    |       |       | 100.0      | 8.2          |

TOTAL NUMBER OF OBSERVATIONS: 796

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275957 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: SEP HOURS (LST): 0300-0500

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |      |      |       |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                  | 4-6  | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | 56-63 |            |              |
| N                      |                      | 1.7  | 2.7  | 1.7   | .3    |       |       |       |       |       |       | 6.5        | 9.8          |
| NNE                    |                      | .7   | 1.7  | .3    |       |       |       |       |       |       |       | 2.7        | 9.0          |
| NNE                    |                      |      | .7   | .3    | .3    |       |       |       |       |       |       | 1.4        | 11.8         |
| NNE                    |                      | .7   | 1.4  | 1.0   | .3    |       |       |       |       |       |       | 3.1        | 11.2         |
| E                      |                      | 1.4  | 3.1  | 1.4   |       |       |       |       |       |       |       | 7.9        | 10.0         |
| ESE                    |                      | .7   | 3.8  | 1.4   |       |       |       |       |       |       |       | 5.5        | 10.1         |
| SE                     |                      | .7   | 3.1  | .7    | .3    |       |       |       |       |       |       | 4.5        | 10.2         |
| ESE                    |                      | 1.7  | 1.7  | 1.7   |       |       |       |       |       |       |       | 5.5        | 10.6         |
| S                      |                      | 1.4  | 2.4  | 1.0   | .3    |       |       |       |       |       |       | 4.9        | 9.8          |
| SSE                    |                      |      | .7   | 1.4   |       |       |       | .3    |       |       |       | 2.4        | 15.6         |
| SW                     |                      | 1.4  | 2.1  | 1.4   |       |       |       |       |       |       |       | 4.5        | 9.5          |
| WSW                    |                      | 1.4  | 1.7  | 1.0   | .3    |       |       |       |       |       |       | 4.2        | 9.3          |
| W                      |                      | 1.7  | 2.4  | 2.7   | .3    |       |       |       |       |       |       | 7.2        | 10.4         |
| WSW                    |                      | 1.4  | .7   | 1.1   |       |       |       |       |       |       |       | 3.2        | 9.8          |
| W                      |                      | .7   | 2.7  | .7    | .3    |       |       |       |       |       |       | 4.5        | 9.0          |
| WNW                    |                      | 1.4  | 1.7  | 1.1   | .7    |       |       |       |       |       |       | 5.9        | 10.9         |
| VARIABLE               |                      |      |      |       |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////// |      |      |       |       |       |       |       |       |       |       | 22.3       | ////         |
| TOTALS                 |                      | 16.7 | 32.6 | 27.1  | 3.4   |       |       | .3    |       |       |       | 100.0      | 7.9          |

TOTAL NUMBER OF OBSERVATIONS: 721

GLOBAL CLIMATOLOGY BRANCH  
USAF/CLTAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 274951 STATION NAME: KAVAN USNR

PERIOD OF RECORD: 78-87  
MONTH: SEP HOURS(EST): 0600-0800

| DIRECTION<br>(DEGREES) | 1-5                  | 6-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | 56-66 | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
| N                      |                      | 1.4  | 2.4   | 1.4   |       | 4.3   |       |       |       |       | 6.5        | 10.2         |
| NNE                    |                      | 4.7  | 1.0   | 1.0   | 4.3   |       |       |       |       |       | 11.0       | 10.8         |
| NE                     |                      | 1.4  | 2.4   | 4.3   | 4.3   |       |       |       |       |       | 12.8       | 9.0          |
| NNE                    |                      | 4.7  | 1.7   | 1.4   |       |       |       |       |       |       | 7.8        | 10.4         |
| E                      |                      | 1.4  | 3.8   | 0.1   |       |       |       |       |       |       | 5.3        | 9.9          |
| ESE                    |                      | 4.7  | 3.1   | 1.4   |       |       |       |       |       |       | 9.2        | 10.4         |
| SE                     |                      | 1.4  | 2.4   | 0.1   |       |       |       |       |       |       | 3.9        | 9.5          |
| SSE                    |                      |      | 2.4   | 0.1   |       |       |       |       |       |       | 2.5        | 11.3         |
| S                      |                      | 1.4  | 3.8   | 1.0   | 4.3   |       |       |       |       |       | 10.5       | 9.1          |
| SSW                    |                      |      | 2.4   | 1.4   | 4.3   |       |       |       |       |       | 10.5       | 11.4         |
| SW                     |                      | 1.4  | 1.0   | 2.4   |       | 4.3   |       |       |       |       | 9.1        | 10.5         |
| WSW                    |                      | 1.4  | 1.4   | 1.4   | 4.3   |       |       |       |       |       | 9.5        | 9.9          |
| W                      |                      | 7.1  | 2.4   | 0.4   |       |       |       |       |       |       | 9.9        | 9.2          |
| WNW                    |                      | 1.4  | 1.0   | 0.4   |       |       |       |       |       |       | 2.8        | 10.7         |
| W                      |                      | 1.4  | 1.4   | 0.1   | 4.3   |       |       |       |       |       | 7.2        | 10.7         |
| WNW                    |                      | 1.4  | 1.0   | 0.1   | 4.3   | 4.3   |       |       |       |       | 11.5       | 11.5         |
| VARIABLE               |                      |      |       |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////// |      |       |       |       |       |       |       |       |       |            | 16.5         |
| TOTALS                 |                      | 16.1 | 30.2  | 21.7  | 21.4  | 11.7  |       |       |       |       | 100.0      | 9.5          |

TOTAL NUMBER OF OBSERVATIONS: 742

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275900 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 75-87  
MONTH: SEP HOURS (LST): 0100-1100

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |      |      |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|------|------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                  | 4-6  | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 |            |              |
| N                      |                      |      | 1.0  | 2.9   | 1.0   |       |       |       |       |       | 4.9        | 14.1         |
| NNE                    |                      | .7   |      | 2.9   |       |       |       |       |       |       | 3.6        | 11.8         |
| NE                     |                      | .7   | .3   | .7    | .3    |       |       |       |       |       | 2.0        | 10.8         |
| ENE                    |                      | 1.0  | .7   | 1.0   | .3    |       |       |       |       |       | 3.1        | 10.1         |
| E                      |                      | 1.0  | 3.1  | 2.9   |       |       |       |       |       |       | 7.0        | 10.6         |
| ESE                    |                      | 1.0  | 1.7  | 1.9   |       |       |       |       |       |       | 4.6        | 9.3          |
| SE                     |                      | 1.7  | 3.1  | 2.9   |       |       |       |       |       |       | 6.6        | 10.0         |
| SSE                    |                      | 1.0  | 1.0  | 2.0   |       |       |       |       |       |       | 4.1        | 10.0         |
| S                      |                      | .7   | 1.7  | 3.1   | .3    | .3    |       |       |       |       | 6.1        | 12.2         |
| SSW                    |                      |      | 3.4  | 2.7   |       |       |       |       |       |       | 6.1        | 10.9         |
| SW                     |                      | 1.0  | 1.9  | 2.9   | .7    |       |       |       |       |       | 6.4        | 10.9         |
| WSW                    |                      |      | 1.7  | 2.7   | .3    | .3    |       |       |       |       | 3.1        | 12.6         |
| W                      |                      | 1.7  | 4.6  | 5.1   | .3    |       | .7    |       |       |       | 12.6       | 11.4         |
| WNW                    |                      | .7   | 1.9  | 4.3   | .3    |       |       |       |       |       | 7.1        | 12.3         |
| W                      |                      | 1.7  | .7   | 2.3   | .3    |       |       |       |       |       | 4.1        | 11.4         |
| WNW                    |                      |      | 2.9  | 2.9   | .7    |       |       |       |       |       | 6.4        | 12.4         |
| VARIABLE               |                      |      |      |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////// |      |      |       |       |       |       |       |       |       | 11.2       | ////         |
| TOTAL                  |                      | 11.4 | 29.3 | 41.8  | 4.9   | .7    | .7    |       |       |       | 100.0      | 10.1         |

TOTAL NUMBER OF OBSERVATIONS: 274

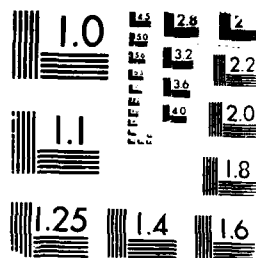
AD-A196 644

HAZARD USSR LIMITED SURFACE OBSERVATIONS CLIMATIC  
SUMMARY (LISOC) PARTS A-F (U) AIR FORCE ENVIRONMENTAL  
TECHNICAL APPLICATIONS CENTER SCOTT AFB IL JUN 88  
UNSAFE/INC/DS-88/027 F/G 4/2

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MICROCOPY RESOLUTION TEST CHART

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275450 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 7F-87  
MONTH: SEP HOURS(UT): 1200-1400

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |     |      |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|-----|------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                  | 4-6 | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56      |              |
| N                      |                      |     | 1.7  | 4.2   | .3    |       |       |       |       |       | 6.3        | 12.9         |
| NNE                    |                      | .7  |      | 1.4   | .3    | .3    |       |       |       |       | 2.8        | 13.5         |
| NE                     |                      |     | .7   | .7    |       |       |       |       |       |       | 1.4        | 10.5         |
| NNE                    |                      | 1.0 | .7   | 2.1   |       |       |       |       |       |       | 3.8        | 10.2         |
| E                      |                      | .7  | 1.4  | 3.5   |       |       |       |       |       |       | 5.2        | 11.2         |
| ESE                    |                      | .7  | .7   | 2.1   | .3    |       |       |       |       |       | 3.5        | 11.9         |
| SE                     |                      | .3  | 1.7  | 1.7   |       |       |       |       |       |       | 3.8        | 10.7         |
| SSE                    |                      | .7  | 1.4  | 4.9   |       |       |       |       |       |       | 6.6        | 12.2         |
| S                      |                      | .7  | 1.0  | 4.2   | .3    |       |       |       |       |       | 6.3        | 11.7         |
| SSW                    |                      | .7  | 1.7  | 4.9   | 1.0   |       |       |       |       |       | 8.4        | 12.8         |
| SW                     |                      | .7  | 1.4  | 4.5   |       |       |       |       |       |       | 6.6        | 11.9         |
| WSW                    |                      | 1.7 | 1.7  | 2.1   | .3    | .3    |       |       |       |       | 6.3        | 11.0         |
| W                      |                      | .7  | 3.5  | 4.0   | 1.4   |       |       |       |       |       | 13.3       | 12.7         |
| WNW                    |                      |     | 1.4  | 4.9   | 2.4   |       | .7    |       |       |       | 9.1        | 14.6         |
| W                      |                      |     | 1.4  | 3.1   | 1.0   |       |       |       |       |       | 5.6        | 13.3         |
| NNW                    |                      | .7  | .7   | 3.1   | 1.0   |       |       |       |       |       | 5.2        | 13.1         |
| VARIABLE               |                      |     |      |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////// |     |      |       |       |       |       |       |       |       | 5.6        | ////         |
| TOTALS                 |                      | 5.7 | 21.0 | 55.6  | 9.7   | .7    | .3    |       |       |       | 100.0      | 11.7         |

TOTAL NUMBER OF OBSERVATIONS: 734

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275950 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: SEP HOURS (LST): 1600-1700

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |     |      |       |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|-----|------|-------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                  | 4-6 | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56 |            |              |
| N                      |                      | .7  | 1.0  | 3.4   | .7    |       |       |       |       |       |       | 5.5        | 12.8         |
| NNE                    |                      | .7  | .7   | 2.0   |       |       |       |       |       |       |       | 3.4        | 10.4         |
| NE                     |                      |     | 1.0  | .7    | .3    |       |       |       |       |       |       | 2.0        | 12.2         |
| NNE                    |                      |     | .3   | 1.0   |       |       |       |       |       |       |       | 1.4        | 11.0         |
| E                      |                      | 1.7 | 1.7  | 2.4   | .3    |       |       |       |       |       |       | 6.1        | 9.9          |
| ESE                    |                      |     | 1.7  | .3    |       |       |       |       |       |       |       | 2.0        | 9.3          |
| SE                     |                      | .7  | 1.7  | 2.0   |       |       |       |       |       |       |       | 4.1        | 10.8         |
| SSE                    |                      |     | .7   | 5.1   |       |       |       |       |       |       |       | 5.8        | 12.6         |
| S                      |                      | 1.0 | 1.4  | 3.8   | 1.0   |       |       |       |       |       |       | 7.2        | 12.0         |
| SSW                    |                      | .7  | 1.7  | 2.7   | 2.4   |       |       |       |       |       |       | 7.2        | 13.6         |
| SW                     |                      | .7  | .7   | 2.7   | .3    |       |       |       |       |       |       | 4.1        | 12.4         |
| WSW                    |                      | .7  | 2.7  | 6.1   | .3    | .7    |       |       |       |       |       | 10.6       | 13.2         |
| W                      |                      |     | 4.1  | 5.5   | 1.0   | .3    |       |       |       |       |       | 14.2       | 13.0         |
| WSW                    |                      | .7  | .7   | 4.8   | 1.4   | .3    |       |       |       |       |       | 7.8        | 14.2         |
| W                      |                      |     | 1.0  | 3.8   | 1.4   | .3    |       |       |       |       |       | 6.5        | 14.9         |
| WNW                    |                      | .7  | 2.0  | 1.7   | 1.4   |       |       |       |       |       |       | 5.8        | 12.4         |
| VARIABLE               |                      |     |      |       |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////// |     |      |       |       |       |       |       |       |       |       | 6.5        | ////         |
| TOTAL                  |                      | 8.4 | 23.2 | 51.2  | 10.6  | 1.7   |       |       |       |       |       | 100.0      | 11.8         |

TOTAL NUMBER OF OBSERVATIONS: 292

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 27525 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: SEP HOURS (LST): 1800-2300

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |      |      |       |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                  | 4-6  | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56 |            |              |
| N                      |                      | 1.4  | 2.1  | 2.1   | .4    |       |       |       |       |       |       | 6.0        | 10.1         |
| NNE                    |                      | 1.4  | 1.1  | .7    | .7    |       |       |       |       |       |       | 4.2        | 10.3         |
| NE                     |                      |      | .7   | .4    |       |       |       |       |       |       |       | 1.1        | 10.7         |
| NNE                    |                      |      | 2.5  |       |       |       |       |       |       |       |       | 2.5        | 9.7          |
| E                      |                      | 1.4  | 2.5  | 2.1   |       |       |       |       |       |       |       | 6.0        | 9.8          |
| ESE                    |                      | .7   | 1.4  | .7    |       |       |       |       |       |       |       | 2.8        | 9.0          |
| SE                     |                      | .7   | 1.8  | 2.5   |       |       |       |       |       |       |       | 4.9        | 10.6         |
| SSE                    |                      | 1.1  | 1.4  | 2.5   |       |       |       |       |       |       |       | 4.9        | 10.1         |
| S                      |                      | 1.1  | 2.1  | 2.5   | .4    |       |       |       |       |       |       | 7.0        | 10.9         |
| SSW                    |                      | 1.1  | .7   | 2.1   | 1.1   |       |       |       |       |       |       | 4.9        | 12.9         |
| SW                     |                      | 1.4  | 2.1  | 1.4   | .7    |       |       |       |       |       |       | 6.0        | 10.6         |
| WSW                    |                      | 1.1  | 1.8  | 2.1   | .4    |       |       |       |       |       |       | 5.7        | 10.5         |
| W                      |                      | 1.4  | 3.5  | 2.5   |       | .4    |       |       |       |       |       | 9.1        | 10.7         |
| WNW                    |                      | 1.1  | 2.5  | 5.3   | .7    | .4    |       |       |       |       |       | 9.8        | 12.4         |
| W                      |                      | .4   | 2.1  | 1.5   | .7    |       |       |       |       |       |       | 5.6        | 11.3         |
| WNW                    |                      | 1.4  | 2.8  | 2.5   |       |       | .4    |       |       |       |       | 8.4        | 11.0         |
| VARIABLE               |                      |      |      |       |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////// |      |      |       |       |       |       |       |       |       |       | 11.6       | ////         |
| TOTALS                 |                      | 10.7 | 10.9 | 35.1  | 4.9   | .7    | .4    |       |       |       |       | 100.0      | 9.6          |

TOTAL NUMBER OF OBSERVATIONS: 255

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275950 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 70-87  
MONTH: SEP HOURS(LST): 2100-2300

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |      |      |       |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                  | 4-6  | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | 56-63 |            |              |
| N                      |                      | .7   | .3   | 1.7   | .3    |       |       |       |       |       |       | 2.7        | 13.1         |
| NNE                    |                      | 1.7  | .7   | 1.0   | .7    |       |       |       |       |       |       | 4.1        | 10.2         |
| NE                     |                      | .7   | 1.4  | 1.0   |       |       |       |       |       |       |       | 2.7        | 10.3         |
| ENE                    |                      | .7   | 2.7  | 1.0   |       |       |       |       |       |       |       | 4.1        | 9.8          |
| E                      |                      | .7   | 3.8  | 2.0   |       |       |       |       |       |       |       | 6.1        | 10.2         |
| ESE                    |                      |      | 1.7  | 2.4   | .3    |       |       |       |       |       |       | 4.4        | 11.6         |
| SE                     |                      | 1.0  | 1.7  | 1.0   |       |       |       |       |       |       |       | 3.6        | 8.7          |
| SSE                    |                      | .7   | 2.4  | 3.1   |       |       |       |       |       |       |       | 5.8        | 10.7         |
| S                      |                      | 1.7  | 2.0  | 2.7   |       | .3    |       |       |       |       |       | 6.8        | 10.7         |
| SSW                    |                      | .7   | .3   | 2.4   |       | .3    |       |       |       |       |       | 3.8        | 12.8         |
| SW                     |                      | .7   | 1.7  | 1.4   |       |       |       |       |       |       |       | 3.8        | 9.8          |
| WSW                    |                      | 1.7  | 2.4  | 1.0   | .3    |       |       |       |       |       |       | 5.5        | 9.4          |
| W                      |                      | 2.7  | 3.1  | 2.4   | 1.0   |       |       |       |       |       |       | 7.6        | 10.7         |
| WNW                    | .3                   | .7   | 1.7  | 2.0   | .7    |       |       |       |       |       |       | 5.5        | 11.1         |
| NW                     |                      | 1.4  | 3.8  | 1.7   | 1.0   |       |       |       |       |       |       | 7.5        | 10.4         |
| NNW                    |                      | .7   | 2.0  | 2.0   |       |       |       |       |       |       |       | 4.4        | 10.6         |
| VARIABLE               |                      |      |      |       |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////// |      |      |       |       |       |       |       |       |       |       | 19.5       | ////         |
| TOTALS                 | .7                   | 13.7 | 31.4 | 30.0  | 4.4   | .7    |       |       |       |       |       | 100.0      | 8.5          |

TOTAL NUMBER OF OBSERVATIONS: 293

GLOBAL CLIMATOLOGY BRANCH      PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
 USAFETAC      FROM HOURLY OBSERVATIONS  
 AIR WEATHER SERVICE/MAC

STATION NUMBER: 27545    STATION NAME: KAZAN USSR

PERIOD OF RECORD: 70-87  
 MONTH: SEP    HOURS(LST): ALL

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |      |      |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|------|------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                  | 4-6  | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56      |              |
| N                      |                      | .3   | 1.5  | 2.2   | .5    | .7    |       |       |       |       | 5.3        | 11.4         |
| NNE                    |                      | 1.7  | .9   | 1.2   | .3    | .7    |       |       |       |       | 3.4        | 10.4         |
| NE                     |                      | .3   | .9   | .6    | .2    |       |       |       |       |       | 2.1        | 10.5         |
| ENE                    |                      | .5   | 1.4  | 1.2   | .1    |       |       |       |       |       | 3.1        | 10.5         |
| E                      |                      | 1.7  | 2.9  | 3.5   | .1    |       |       |       |       |       | 6.5        | 10.2         |
| ESE                    |                      | .6   | 2.2  | 1.4   | .1    |       |       |       |       |       | 4.3        | 10.2         |
| SE                     |                      | .7   | 2.2  | 1.6   | .7    |       |       |       |       |       | 4.6        | 10.0         |
| SSE                    |                      | .5   | 1.6  | 3.1   |       |       |       |       |       |       | 5.1        | 11.2         |
| S                      |                      | 1.1  | 2.0  | 2.6   | .3    | .1    |       |       |       |       | 6.2        | 10.8         |
| SSW                    |                      | .6   | 1.8  | 3.3   | .6    | .2    | .0    | .1    |       |       | 5.5        | 12.4         |
| SW                     |                      | 1.2  | 1.6  | 2.1   | .2    | .7    |       |       |       |       | 5.2        | 10.3         |
| WSW                    |                      | 1.1  | 2.2  | 2.3   | .3    | .2    |       |       |       |       | 6.2        | 11.2         |
| W                      |                      | 1.6  | 3.5  | 4.5   | .6    | .1    | .1    |       |       |       | 10.4       | 11.3         |
| WNW                    | .1                   | 1.0  | 1.3  | 3.7   | .7    | .1    | .0    |       |       |       | 6.9        | 12.3         |
| NW                     |                      | .6   | 1.6  | 2.5   | .7    | .7    |       |       |       |       | 5.7        | 11.7         |
| NNW                    |                      | .0   | 1.8  | 2.2   | .6    | .7    | .0    |       |       |       | 5.6        | 11.4         |
| VARIABLE               |                      |      |      |       |       |       |       |       |       |       |            |              |
| CALC                   | //////////////////// |      |      |       |       |       |       |       |       |       | 14.0       | ////         |
| TOTALS                 | .7                   | 13.7 | 29.9 | 36.1  | 5.4   | .7    | .2    | .1    |       |       | 100.0      | 9.5          |

TOTAL NUMBER OF OBSERVATIONS: 2718

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275907 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: OCT HOURS(LEST): 0000-0200

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |      |      |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|------|------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                  | 4-6  | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56      |              |
| N                      |                      | 1.6  | 2.7  | 3.3   |       | .7    |       |       |       |       | 7.2        | 10.8         |
| NNE                    |                      |      | 1.0  | .7    |       |       |       |       |       |       | 1.6        | 10.0         |
| N                      |                      | .7   | .7   | .3    |       |       |       |       |       |       | 1.6        | 7.6          |
| NNE                    |                      |      | .7   | .3    |       |       |       |       |       |       | 1.0        | 11.3         |
| E                      |                      | .7   | 1.6  | .7    |       |       |       |       |       |       | 3.0        | 9.1          |
| ESE                    |                      | 1.6  | 1.3  | .7    |       |       |       |       |       |       | 3.6        | 8.2          |
| E                      |                      | .7   | 1.0  | 3.6   | .3    | .3    |       |       |       |       | 5.9        | 12.6         |
| ESE                    |                      | .7   | 1.6  | 1.2   | .3    |       |       |       |       |       | 3.6        | 11.0         |
| S                      |                      | 2.3  | 2.0  | 3.9   | .3    |       |       |       |       |       | 8.6        | 10.6         |
| SSW                    |                      | 1.7  | 1.0  | 3.9   | .7    |       |       |       |       |       | 6.9        | 12.1         |
| SW                     |                      | .7   | 3.0  | 2.3   | .3    |       |       |       |       |       | 5.9        | 11.1         |
| WSW                    |                      | 1.0  | 3.2  | 3.3   | .7    |       |       |       |       |       | 8.9        | 10.5         |
| W                      |                      | .7   | .7   | 3.0   | .7    |       |       |       |       |       | 4.6        | 12.4         |
| WNW                    |                      |      | 2.6  | 4.3   |       |       |       |       |       |       | 6.9        | 11.9         |
| W                      |                      | 1.0  | 1.3  | 2.3   | .7    | .3    |       |       |       |       | 5.6        | 12.3         |
| WNW                    |                      | 1.7  | 2.3  | 2.6   | .3    |       |       |       |       |       | 7.6        | 10.4         |
| VARIABLE               |                      |      |      |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////// |      |      |       |       |       |       |       |       |       | 17.4       | ////         |
| TOTALS                 |                      | 12.2 | 27.6 | 36.5  | 4.3   | 1.7   |       |       |       |       | 100.0      | 9.1          |

TOTAL NUMBER OF OBSERVATIONS: 304

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275050 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 79-87  
MONTH: OCT HOURS (LST): 0300-0500

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS                  |      |       |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|--------------------------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-7                                  | 8-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56 |            |              |
| N                      |                                      | 1.7  | 2.9   | 2.9   |       |       |       |       |       |       | 6.9        | 10.2         |
| NNE                    |                                      |      | 1.3   | .7    |       |       |       |       |       |       | 2.0        | 11.0         |
| NE                     |                                      | 1.7  | .3    | .3    | .3    |       |       |       |       |       | 2.3        | 10.4         |
| NNE                    |                                      | .7   | 1.0   | .3    |       |       |       |       |       |       | 1.6        | 9.6          |
| E                      |                                      |      | 2.0   |       |       |       |       |       |       |       | 2.0        | 9.3          |
| ESE                    |                                      | 1.0  | 1.0   | 1.6   |       |       |       |       |       |       | 3.6        | 10.0         |
| SE                     |                                      | .7   | 1.6   | 2.3   | .7    |       |       |       |       |       | 5.2        | 12.4         |
| SSE                    |                                      | .7   | 1.3   | 2.3   |       |       |       |       |       |       | 5.2        | 11.1         |
| S                      |                                      | 1.0  | 2.3   | 2.3   | .3    |       | .3    |       |       |       | 7.2        | 11.9         |
| SSW                    |                                      | .3   | 2.9   | 2.6   | .3    |       |       |       |       |       | 7.2        | 11.0         |
| SW                     |                                      | 2.6  | 1.3   | 2.7   | .3    |       |       |       |       |       | 8.2        | 10.4         |
| WSW                    |                                      | 1.0  | 1.6   | 2.3   |       |       |       |       |       |       | 4.9        | 10.8         |
| W                      |                                      | .7   | 1.0   | 2.9   | .7    |       |       |       |       |       | 6.2        | 12.7         |
| WNW                    |                                      | .7   | 1.6   | 2.6   | .3    |       |       |       |       |       | 6.2        | 11.8         |
| W                      |                                      | 1.3  | 1.3   | 2.9   | .3    | .3    |       |       |       |       | 7.2        | 11.6         |
| WNW                    |                                      | 1.0  | 2.0   | 1.6   | .7    |       |       |       |       |       | 5.2        | 10.8         |
| VARIABLE               |                                      |      |       |       |       |       |       |       |       |       |            |              |
| CALC                   | //////////////////////////////////// |      |       |       |       |       |       |       |       |       | 19.0       | ////         |
| TOTALS                 |                                      | 13.4 | 25.5  | 37.6  | 2.9   | 1.7   | .3    |       |       |       | 100.0      | 9.0          |

TOTAL NUMBER OF OBSERVATIONS: 706

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIP WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275950 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 79-87  
MONTH: OCT HOURS(LST): 0600-0800

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |      |      |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|------|------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                  | 4-6  | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56      |              |
| N                      |                      | .7   | 3.0  | 1.7   | .7    |       |       |       |       |       | 5.7        | 11.3         |
| NNE                    |                      |      | 1.0  | .7    |       |       |       |       |       |       | 1.7        | 11.6         |
| NE                     |                      | .3   | 1.0  | .3    |       |       |       |       |       |       | 1.7        | 9.2          |
| NNE                    |                      | .7   | .3   | .7    |       |       |       |       |       |       | 1.7        | 9.2          |
| E                      |                      | 1.0  | 1.7  | .7    |       |       |       |       |       |       | 3.4        | 8.4          |
| ESE                    |                      | .7   | 1.3  | 1.7   |       |       |       |       |       |       | 3.7        | 10.4         |
| SE                     |                      | .3   | 2.3  | 3.4   | .3    | .3    |       |       |       |       | 6.7        | 12.4         |
| SSE                    |                      | .7   | .7   | 2.0   |       | .3    |       |       |       |       | 3.4        | 12.9         |
| S                      |                      | .7   | 2.3  | 5.4   | .3    |       | .3    |       |       |       | 9.1        | 12.4         |
| SSW                    |                      | .7   | 2.0  | 3.7   |       |       |       |       |       |       | 6.4        | 10.9         |
| SW                     |                      | 1.7  | 2.3  | 7.7   |       |       |       |       |       |       | 7.7        | 10.4         |
| WSW                    |                      | .7   | 1.0  | 3.4   |       |       |       |       |       |       | 5.0        | 10.8         |
| W                      |                      | 1.0  | 1.3  | 7.4   | .3    |       |       |       |       |       | 6.0        | 11.4         |
| WNW                    |                      | 2.0  | 1.3  | 1.7   | 1.0   |       |       |       |       |       | 6.0        | 10.5         |
| NW                     |                      | .7   | 1.3  | 3.7   |       | .3    |       |       |       |       | 5.7        | 12.5         |
| NNW                    |                      | 2.3  | 3.4  | 1.7   |       | .3    |       |       |       |       | 7.7        | 9.8          |
| VARIABLE               |                      |      |      |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////// |      |      |       |       |       |       |       |       |       | 18.5       | ////         |
| TOTALS                 |                      | 15.1 | 28.5 | 37.6  | 2.7   | 1.7   | .7    |       |       |       | 103.0      | 9.0          |

TOTAL NUMBER OF OBSERVATIONS: 078

GLOBAL CLIMATOLOGY BRANCH  
DTAFETAC  
AIR WEATHER SERVICE/HAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275950 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 79-87  
MONTH: OCT HOURS(UT): 0900-1100

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |     |      |       |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|-----|------|-------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                  | 4-6 | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56 |            |              |
| N                      |                      |     | 2.0  | 1.3   | 1.0   |       |       |       |       |       |       | 4.2        | 11.5         |
| NNW                    |                      |     | .7   | 2.0   | .3    |       |       |       |       |       |       | 2.9        | 12.8         |
| NNE                    |                      | .3  | 1.0  | 1.3   |       |       |       |       |       |       |       | 2.6        | 11.0         |
| E                      |                      |     | 2.0  | .3    |       |       |       |       |       |       |       | 2.3        | 9.4          |
| ESE                    |                      | .7  | 1.0  | .7    | .3    |       |       |       |       |       |       | 2.6        | 10.4         |
| ENE                    |                      | .7  | 1.3  | 2.0   |       |       |       |       |       |       |       | 3.6        | 10.9         |
| SE                     |                      | .7  | .3   | 2.6   | .3    |       |       |       |       |       |       | 3.9        | 12.4         |
| SSE                    |                      | .7  | 2.0  | 1.0   | .3    |       |       |       |       |       |       | 5.9        | 11.7         |
| S                      |                      |     | 3.9  | 5.9   | 1.3   |       |       |       |       |       |       | 11.1       | 12.5         |
| SSW                    |                      | 1.3 | 2.6  | 2.9   | .3    |       |       |       |       |       |       | 6.9        | 10.9         |
| SW                     |                      | 1.3 | 2.3  | 3.6   | .3    |       |       |       |       |       |       | 7.2        | 11.2         |
| WSW                    |                      | 1.3 | 1.0  | 2.9   | .3    |       |       |       |       |       |       | 5.6        | 10.6         |
| W                      |                      | 1.3 | 2.6  | 4.2   |       |       |       |       |       |       |       | 7.8        | 10.8         |
| WNW                    |                      | .7  | 2.3  | 5.0   | .7    |       |       |       |       |       |       | 8.8        | 12.4         |
| NW                     |                      | 1.3 | 1.3  | 2.9   | 1.0   |       |       |       |       |       |       | 6.5        | 11.8         |
| NNW                    |                      | .7  | 2.5  | 3.3   |       |       |       |       |       |       |       | 6.5        | 10.5         |
| VARIABLE               |                      |     |      |       |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////// |     |      |       |       |       |       |       |       |       |       | 11.4       | ////         |
| TOTALS                 |                      | 5.5 | 25.8 | 44.1  | 6.2   |       |       |       |       |       |       | 100.0      | 10.2         |

TOTAL NUMBER OF OBSERVATIONS: 300

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275953 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 76-97  
MONTH: OCT HOURS/LEST: 1200-1400

| DIRECTION<br>(DEGREES) | 1-3                  | 4-6 | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-53 | 54-56 | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|-----|------|-------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
| N                      |                      | 1.7 | 1.7  | 2.0   | 1.0   |       |       |       |       |       |       | 5.0        | 12.7         |
| NNE                    |                      | 1.7 | 1.0  | 1.7   | 1.3   |       |       |       |       |       |       | 3.7        | 11.7         |
| N                      |                      | 1.0 | 1.7  | 1.3   | 1.3   |       |       |       |       |       |       | 4.4        | 10.8         |
| ENE                    |                      |     | 1.0  | 1.3   |       |       |       |       |       |       |       | 1.3        | 9.5          |
| E                      |                      | 1.0 |      | 1.7   | 1.3   |       |       |       |       |       |       | 3.0        | 10.6         |
| ESE                    |                      |     | 1.3  | 1.3   |       |       |       |       |       |       |       | 1.7        | 12.0         |
| SE                     |                      |     | 1.7  | 2.3   |       |       |       |       |       |       |       | 2.7        | 14.0         |
| SSE                    |                      |     | 2.0  | 1.7   | 1.7   |       |       |       |       |       |       | 4.7        | 12.2         |
| S                      |                      |     | 1.7  | 6.0   | 1.3   |       |       |       |       |       |       | 9.1        | 13.5         |
| SSW                    |                      | 1.7 | 1.0  | 6.0   | 1.3   | 1.7   |       |       |       |       |       | 9.4        | 13.6         |
| S4                     |                      | 1.7 | 2.7  | 4.0   | 1.7   |       |       |       |       |       |       | 9.1        | 11.8         |
| WSW                    |                      |     | 1.7  | 3.0   | 1.3   |       |       |       |       |       |       | 5.0        | 12.9         |
| W                      | 1.7                  | 1.7 | 4.0  | 6.4   | 1.7   |       |       |       |       |       |       | 15.1       | 11.6         |
| WNW                    |                      | 1.7 | 1.7  | 5.0   | 1.3   |       |       |       |       |       |       | 8.7        | 12.9         |
| W                      |                      |     | 2.3  | 4.4   | 1.3   |       |       |       |       |       |       | 7.3        | 12.5         |
| WNW                    |                      |     | 1.0  | 1.3   |       |       |       |       |       |       |       | 3.4        | 11.9         |
| VARIABLE               |                      |     |      |       |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////// |     |      |       |       |       |       |       |       |       |       | 7.4        | ////         |
| TOTALS                 | 1.7                  | 6.7 | 24.2 | 50.7  | 9.4   | 1.7   |       |       |       |       |       | 100.0      | 11.4         |

TOTAL NUMBER OF OBSERVATIONS: 276

GLOBAL CLIMATOLOGY BRANCH      PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
 USAF/ETAC      FROM HOURLY OBSERVATIONS  
 AIR WEATHER SERVICE/MAC

STATION NUMBER: 2799      STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
 MONTH: OCT      HOURS(UT): 1500-1700

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |     |      |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|-----|------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                  | 4-6 | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | 56-56      |              |
| N                      |                      | 1.7 | 1.6  | 2.6   | 1.0   | .3    |       |       |       |       | 5.9        | 12.2         |
| NNW                    |                      | 1.7 | 2.0  | 1.3   |       |       |       |       |       |       | 3.6        | 10.0         |
| NNE                    |                      | 1.7 | 1.3  | 1.6   | .3    |       |       |       |       |       | 4.6        | 10.4         |
| ESE                    |                      | 1.7 |      | .3    |       |       |       |       |       |       | .7         | 8.0          |
| E                      |                      |     | .7   | 1.3   |       |       |       |       |       |       | 2.0        | 12.0         |
| ESE                    |                      | 1.7 | .7   | .3    |       |       |       |       |       |       | 1.3        | 9.0          |
| SE                     |                      | 1.7 | .3   | 2.9   |       |       |       |       |       |       | 3.9        | 12.3         |
| SSE                    |                      | 1.7 | 1.6  | 4.9   | .7    |       |       |       |       |       | 7.5        | 13.2         |
| S                      |                      | 1.7 | 1.3  | 5.2   | .7    |       |       |       |       |       | 8.5        | 13.6         |
| SSW                    |                      |     |      | 4.2   | .7    | .7    |       |       |       |       | 5.6        | 15.1         |
| SW                     |                      | 1.6 | 1.6  | 7.9   | .3    | .3    |       |       |       |       | 7.9        | 11.7         |
| WSW                    |                      | 1.7 | .3   | 5.6   | .3    |       |       |       |       |       | 7.2        | 13.0         |
| W                      |                      | 1.7 | 4.1  | 7.6   | 1.0   |       |       |       |       |       | 14.4       | 12.0         |
| WNW                    |                      | 1.7 | 1.6  | 6.3   | .3    |       |       |       |       |       | 8.8        | 12.9         |
| WN                     |                      | 1.7 | 2.9  | 2.9   | .3    |       |       |       |       |       | 6.2        | 10.9         |
| NNN                    |                      | 1.7 | 1.0  | 0.3   | .7    |       |       |       |       |       | 4.2        | 12.3         |
| VARIABLE               |                      |     |      |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////// |     |      |       |       |       |       |       |       |       | 7.2        | ////         |
| TOTALS                 |                      | 9.9 | 21.6 | 54.9  | 6.2   | 1.3   |       |       |       |       | 100.0      | 11.5         |

TOTAL NUMBER OF OBSERVATIONS: 700

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275957 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 79-87  
MONTH: OCT HOURS(LEST): 1800-2000

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |      |      |       |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                  | 4-6  | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56 |            |              |
| N                      |                      | 1.7  | 1.7  | 3.4   | .7    |       |       |       |       |       |       | 8.4        | 10.0         |
| NNE                    |                      |      | 1.7  | 1.7   |       |       |       |       |       |       |       | 3.4        | 11.2         |
| NE                     |                      | .7   | 1.0  |       |       |       |       |       |       |       |       | 1.7        | 7.5          |
| NNE                    |                      | .7   | 1.0  | .3    |       |       |       |       |       |       |       | 1.7        | 9.2          |
| E                      |                      |      | .3   | .7    |       |       |       |       |       |       |       | 1.0        | 10.7         |
| ESE                    |                      | 1.0  | 1.3  | 1.3   |       |       |       |       |       |       |       | 3.7        | 9.8          |
| SE                     |                      |      | 1.7  | 2.7   | .3    |       |       |       |       |       |       | 4.7        | 11.9         |
| SSE                    |                      | .7   | 1.0  | 4.0   |       |       |       |       |       |       |       | 5.4        | 11.9         |
| S                      |                      | 1.7  | 2.3  | 4.4   | .3    |       |       |       |       |       |       | 8.7        | 11.7         |
| SSW                    |                      | .7   | 2.3  | 5.4   | .3    |       |       |       |       |       |       | 8.4        | 12.2         |
| SW                     |                      | .7   | 2.0  | 7.4   |       |       |       |       |       |       |       | 6.7        | 11.1         |
| WSW                    |                      | 1.0  | 2.0  | 2.0   |       |       |       |       |       |       |       | 7.0        | 9.0          |
| W                      |                      | 1.7  | 3.4  | 7.7   | .7    |       |       |       |       |       |       | 8.7        | 11.5         |
| WNW                    |                      | .7   | 2.2  | 4.7   | .3    |       |       |       |       |       |       | 8.1        | 11.4         |
| NW                     |                      | .7   | .7   | 2.7   | .7    |       |       |       |       |       |       | 4.7        | 12.4         |
| NNW                    |                      | .7   | 1.0  | 2.3   |       | .3    |       |       |       |       |       | 4.4        | 11.9         |
| VARIABLE               |                      |      |      |       |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////// |      |      |       |       |       |       |       |       |       |       | 14.4       | ////         |
| TOTALS                 |                      | 17.0 | 25.0 | 40.6  | 3.0   | .3    |       |       |       |       |       | 100.0      | 9.5          |

TOTAL NUMBER OF OBSERVATIONS: 298

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275950 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 79-87  
MONTH: OCT HOURS (LST): 2100-2300

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |      |      |       |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                  | 4-6  | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56 |            |              |
| N                      |                      | 1.7  | 1.3  | 2.7   |       |       |       |       |       |       |       | 5.7        | 9.8          |
| NNE                    |                      | .7   | 1.3  | 1.0   |       |       |       |       |       |       |       | 3.0        | 10.4         |
| NF                     |                      | 1.7  | 1.0  |       |       |       |       |       |       |       |       | 2.7        | 6.8          |
| ENE                    |                      | .7   | 1.0  | .7    |       |       |       |       |       |       |       | 2.4        | 9.4          |
| E                      |                      | .7   | .7   | .3    |       |       |       |       |       |       |       | 1.7        | 9.5          |
| ESE                    |                      | .7   | 1.0  | 1.0   |       |       |       |       |       |       |       | 2.4        | 10.3         |
| SE                     |                      | .7   | 1.3  | 2.0   | 1.0   |       |       |       |       |       |       | 5.1        | 12.6         |
| SSE                    |                      | .7   | 2.0  | 3.0   |       |       |       |       |       |       |       | 5.7        | 10.1         |
| S                      |                      | 1.0  | 3.4  | 2.4   | .7    | .3    |       |       |       |       |       | 7.7        | 11.7         |
| SSW                    |                      | 1.0  | 4.7  | 3.4   |       |       |       |       |       |       |       | 9.1        | 10.3         |
| SW                     |                      | 1.7  | 1.7  | 3.7   |       |       |       |       |       |       |       | 7.1        | 10.7         |
| WSW                    |                      | .7   | 1.3  | 3.0   |       |       |       |       |       |       |       | 5.1        | 11.0         |
| W                      |                      | 2.0  | 1.7  | 5.7   | .7    |       |       |       |       |       |       | 10.1       | 11.7         |
| WNW                    |                      | 1.7  | 1.0  | 3.0   | .3    |       |       |       |       |       |       | 5.7        | 11.1         |
| W                      |                      | .7   | .7   | 3.4   | .3    |       |       |       |       |       |       | 5.1        | 12.3         |
| WNW                    |                      | .7   | 2.7  | 3.4   | .3    | .3    |       |       |       |       |       | 7.4        | 11.6         |
| VARIABLE               |                      |      |      |       |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////// |      |      |       |       |       |       |       |       |       |       | 14.5       | ////         |
| TOTALS                 |                      | 10.7 | 26.9 | 30.7  | 3.4   | .7    |       |       |       |       |       | 100.0      | 9.4          |

TOTAL NUMBER OF OBSERVATIONS: 277

GLOBAL CLIMATOLOGY BRANCH  
USAF/ETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 27595 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: OCT HOURS(LOCAL): ALL

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |      |      |       |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                  | 4-6  | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56 |            |              |
| N                      |                      | 1.7  | 2.0  | 2.5   | .5    | .1    |       |       |       |       |       | 6.1        | 11.2         |
| NNE                    |                      | .7   | 1.2  | 1.2   | .1    |       |       |       |       |       |       | 2.7        | 11.1         |
| NE                     |                      | .9   | 1.0  | .7    | .1    | .0    |       |       |       |       |       | 2.7        | 9.6          |
| NNE                    |                      | .3   | .9   | .4    |       |       |       |       |       |       |       | 1.6        | 5.5          |
| E                      |                      | .5   | 1.0  | .7    | .1    |       |       |       |       |       |       | 2.3        | 10.0         |
| ESE                    |                      | .7   | 1.0  | 1.1   |       |       |       |       |       |       |       | 2.8        | 9.7          |
| SE                     |                      | .6   | 1.1  | 2.7   | .3    | .2    |       |       |       |       |       | 4.8        | 12.5         |
| SSE                    |                      | .4   | 1.5  | 7.1   | .2    | .3    |       |       |       |       |       | 5.3        | 11.8         |
| S                      |                      | .2   | 2.4  | 4.7   | .7    | .2    | .0    | .2    |       |       |       | 8.7        | 12.3         |
| SSW                    |                      | .7   | 2.1  | 4.1   | .5    | .1    |       |       |       |       |       | 7.5        | 12.0         |
| SW                     |                      | 1.7  | 2.1  | 3.6   | .2    | .3    |       |       |       |       |       | 7.3        | 11.1         |
| WSW                    |                      | 1.1  | 1.6  | 3.2   | .2    |       |       |       |       |       |       | 6.1        | 11.1         |
| W                      |                      | 1.1  | 2.4  | 5.0   | .6    |       |       |       |       |       |       | 9.1        | 11.7         |
| WNW                    |                      | .6   | 1.8  | 4.3   | .5    |       |       |       |       |       |       | 7.4        | 12.0         |
| W                      |                      | .7   | 1.5  | 3.3   | .5    | .1    |       |       |       |       |       | 6.1        | 12.0         |
| WNW                    |                      | .5   | 2.1  | 2.4   | .2    | .1    |       |       |       |       |       | 5.8        | 11.0         |
| VARIABLE               |                      |      |      |       |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////// |      |      |       |       |       |       |       |       |       |       | 13.7       | ////         |
| TOTALS                 | .7                   | 11.8 | 25.9 | 43.1  | 4.6   | .8    | .0    | .2    |       |       |       | 100.0      | 9.9          |

TOTAL NUMBER OF OBSERVATIONS: 2413

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAL

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275457 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 77-86  
MONTH: NOV HOURS (LST): 0000-0200

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |      |      |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|------|------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                  | 4-6  | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56      |              |
| N                      |                      | 1.7  | .7   | 3.1   | .7    |       |       |       |       |       | 6.3        | 11.8         |
| NNE                    |                      | .7   | 1.4  | 1.7   |       |       |       |       |       |       | 3.5        | 11.4         |
| NE                     |                      | .7   | 1.0  | 1.0   |       |       |       |       |       |       | 2.4        | 10.3         |
| NNE                    |                      | .7   | 1.0  | 1.4   |       |       |       |       |       |       | 2.8        | 11.0         |
| E                      |                      |      | .7   | .3    | .3    |       |       |       |       |       | 1.4        | 12.3         |
| ESE                    |                      | .7   | 1.4  | .3    |       |       |       |       |       |       | 2.1        | 9.0          |
| SE                     |                      | 1.0  | .7   | 1.7   | .7    | .3    |       |       |       |       | 4.5        | 13.0         |
| SSE                    |                      | 1.4  | 1.4  | 4.9   | 3.1   |       |       |       |       |       | 10.8       | 13.3         |
| S                      |                      |      | 3.1  | 8.0   | 3.5   | 1.4   | .3    |       |       |       | 16.4       | 15.0         |
| SSW                    |                      | .7   | 1.7  | 1.7   | .7    |       |       |       |       |       | 3.8        | 12.7         |
| SW                     |                      | 1.0  | 2.4  | 3.8   | .3    | .3    |       |       |       |       | 4.0        | 12.1         |
| WSW                    |                      | 1.0  | 2.4  | 4.5   | .3    | .3    |       |       |       |       | 4.7        | 11.9         |
| W                      |                      | .7   | 1.4  | 4.2   | .7    | .3    | .3    |       |       |       | 7.7        | 13.6         |
| WNW                    |                      | 1.4  | 1.4  | 3.5   | .7    |       |       |       |       |       | 7.0        | 10.9         |
| NW                     |                      |      | .3   | 1.4   | .3    |       |       |       |       |       | 2.1        | 13.2         |
| NNW                    |                      | 1.0  | 1.0  | 1.0   |       |       | .3    |       |       |       | 3.5        | 11.7         |
| VARIABLE               |                      |      |      |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////// |      |      |       |       |       |       |       |       |       | 9.1        | ////         |
| TOTALS                 |                      | 11.1 | 21.6 | 42.9  | 11.5  | 2.9   | 1.0   |       |       |       | 100.0      | 11.5         |

TOTAL NUMBER OF OBSERVATIONS: 257

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/HAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 27595 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 77-86  
MONTH: NOV HOURS(IST): 0300-0500

| DIRECTION<br>(IN SPEED) | WIND SPEED IN KNOTS  |     |      |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|-------------------------|----------------------|-----|------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                         | 1-3                  | 4-6 | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56      |              |
| N                       |                      | .7  | 3.1  | 1.7   | .3    |       |       |       |       |       | 5.8        | 10.3         |
| NNE                     |                      | .7  | .7   | 1.4   |       |       |       |       |       |       | 2.4        | 10.3         |
| NE                      |                      | .7  | .7   | 1.0   |       |       |       |       |       |       | 2.1        | 10.7         |
| ENE                     |                      | .7  | 1.0  | 1.0   |       |       |       |       |       |       | 2.4        | 10.3         |
| E                       |                      | .7  | .7   | .3    |       |       |       |       |       |       | 1.0        | 9.3          |
| ESE                     |                      | .7  | 2.1  | .7    |       |       |       |       |       |       | 3.1        | 9.3          |
| SE                      |                      | .7  | 1.0  | 2.4   | 1.7   | .7    |       |       |       |       | 6.2        | 13.7         |
| ESE                     |                      | .7  | 1.0  | 4.8   | 2.1   | .7    |       |       |       |       | 8.9        | 14.3         |
| S                       |                      | .7  | 1.7  | 7.5   | 2.7   | 1.7   |       |       |       |       | 14.0       | 16.3         |
| SSW                     |                      | .7  | 3.1  | 2.4   | 1.0   |       | .3    |       |       |       | 8.6        | 12.6         |
| SW                      |                      | .7  | 1.7  | 2.7   | .3    |       |       |       |       |       | 5.1        | 11.5         |
| WSW                     |                      | .7  | 2.1  | 4.1   | .3    | .3    |       |       |       |       | 7.6        | 11.8         |
| W                       |                      | .7  | 3.1  | 5.1   | 1.7   |       |       |       |       |       | 10.3       | 12.8         |
| WSW                     |                      |     | 1.4  | 3.8   |       | .7    |       |       |       |       | 5.5        | 13.3         |
| W                       |                      |     | 1.0  | 1.0   |       |       |       |       |       |       | 2.1        | 11.7         |
| WNW                     |                      | .7  | 1.0  | .7    | .3    |       | .3    |       |       |       | 3.1        | 13.1         |
| VARIABLE                |                      |     |      |       |       |       |       |       |       |       |            |              |
| CALM                    | //////////////////// |     |      |       |       |       |       |       |       |       | 12.0       | ////         |
| TOTALS                  |                      | 6.7 | 25.0 | 41.6  | 10.6  | 3.4   | .7    |       |       |       | 100.0      | 11.2         |

TOTAL NUMBER OF OBSERVATIONS: 292

GLOBAL CLIMATOLOGY BRANCH  
USAF/CIAC  
AIR WEATHER SERVICE/MAL

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275957 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 77-86  
MONTH: NOV HOURS (LST): 0600-0800

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |     |      |       |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|-----|------|-------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                  | 4-6 | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56 |            |              |
| N                      |                      | .7  | .7   | 3.4   | .3    |       |       |       |       |       |       | 4.8        | 12.8         |
| NNE                    |                      | .7  | 1.4  | 1.4   |       |       |       |       |       |       |       | 3.1        | 10.2         |
| NE                     |                      |     | .7   | 1.0   |       |       |       |       |       |       |       | 1.4        | 11.5         |
| ENE                    |                      | .7  | 2.1  |       |       |       |       |       |       |       |       | 2.8        | 8.3          |
| E                      |                      | .7  | 1.0  | 1.7   |       |       |       |       |       |       |       | 3.4        | 10.6         |
| ESE                    |                      | .7  | 1.4  | .3    |       |       |       |       |       |       |       | 2.1        | 8.7          |
| SE                     |                      | .7  | .7   | 2.4   | .3    |       |       |       |       |       |       | 4.1        | 11.9         |
| SSE                    |                      | .7  | 2.4  | 6.2   | 2.4   | 1.4   | .3    |       |       |       |       | 13.1       | 14.8         |
| S                      |                      | .7  | 3.4  | 7.2   | 3.1   | 1.0   | .3    |       |       |       |       | 15.9       | 14.2         |
| SSW                    |                      | 1.0 | 2.8  | 2.8   | 1.0   | .3    |       |       |       |       |       | 7.9        | 11.8         |
| SW                     |                      | .7  | 2.4  | 2.4   | .7    |       |       |       |       |       |       | 6.2        | 11.8         |
| WSW                    |                      | 1.0 | .3   | 3.4   | .3    |       |       |       |       |       |       | 5.2        | 11.9         |
| W                      |                      | .7  | 2.4  | 4.5   | .3    | .3    |       |       |       |       |       | 8.3        | 12.1         |
| WSW                    |                      | .7  | 2.8  | 2.4   | .3    |       |       |       |       |       |       | 6.6        | 11.2         |
| WNW                    |                      | .7  | .7   | 1.0   |       |       |       |       |       |       |       | 2.4        | 10.0         |
| NNW                    |                      | .7  | .7   | 1.7   | .7    | .3    |       |       |       |       |       | 3.8        | 14.1         |
| VARIABLE               |                      |     |      |       |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////// |     |      |       |       |       |       |       |       |       |       | 9.0        | ////         |
| TOTALS                 |                      | 9.1 | 25.5 | 40.4  | 9.7   | 3.4   | .7    |       |       |       |       | 100.0      | 11.4         |

TOTAL NUMBER OF OBSERVATIONS: 290

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/HAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275251 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 77-86  
MONTH: NOV HOURS (LST): 0900-1100

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS                  |     |      |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|--------------------------------------|-----|------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                                  | 4-6 | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | 56-66      |              |
| N                      |                                      |     | 1.4  | 2.8   |       |       |       |       |       |       | 4.2        | 12.7         |
| NNE                    |                                      | .4  |      | 1.8   | .4    |       |       |       |       |       | 2.5        | 13.6         |
| NE                     |                                      |     | 1.8  | .4    |       |       |       |       |       |       | 2.1        | 10.0         |
| NNE                    |                                      |     | 1.1  | .4    |       |       |       |       |       |       | 1.4        | 9.0          |
| E                      |                                      |     | 1.1  | .7    |       |       |       |       |       |       | 1.8        | 11.6         |
| ESE                    |                                      |     | 1.4  | 1.4   |       |       |       |       |       |       | 2.8        | 10.5         |
| SE                     |                                      | .4  | 1.4  | 2.8   | .7    |       | .4    |       |       |       | 5.6        | 13.7         |
| SSE                    |                                      | .7  | 1.4  | 6.7   | 1.4   | .7    |       |       |       |       | 12.9       | 13.9         |
| S                      | .4                                   | .4  | 3.9  | 2.2   | 2.8   | 1.1   | .7    |       |       |       | 18.3       | 14.0         |
| SSW                    |                                      | .7  | 2.1  | 3.9   |       | .4    |       |       |       |       | 7.0        | 12.5         |
| SW                     |                                      | .4  | 1.1  | 4.2   | .4    | .4    |       |       |       |       | 6.3        | 13.3         |
| WSW                    |                                      | .4  | 2.1  | 4.9   |       |       |       |       |       |       | 7.4        | 11.7         |
| W                      |                                      | 2.1 | 1.8  | 5.3   | .7    |       |       |       |       |       | 9.9        | 11.4         |
| WNW                    |                                      | .4  | 1.4  | 2.5   |       |       |       |       |       |       | 4.2        | 10.8         |
| W                      |                                      | .4  | 1.1  | 1.8   | .4    | .4    |       |       |       |       | 3.9        | 12.7         |
| WNW                    |                                      |     | .7   | 2.3   | .7    |       |       |       |       |       | 4.2        | 13.7         |
| VARIABLE               |                                      |     |      |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////////////////////// |     |      |       |       |       |       |       |       |       | 7.4        | ////         |
| TOTALS                 | .4                                   | 6.7 | 23.6 | 51.4  | 7.4   | 2.9   | 1.1   |       |       |       | 100.0      | 11.8         |

TOTAL NUMBER OF OBSERVATIONS: 254

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275957 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 77-86  
MONTH: NOV HOURS: 1200-1400

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |     |      |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|-----|------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                  | 4-6 | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56      |              |
| N                      |                      | .7  | 1.4  | 2.1   | .3    |       |       |       |       |       | 4.5        | 11.6         |
| NNE                    |                      |     | 1.0  | 1.4   |       | .3    |       |       |       |       | 2.8        | 13.1         |
| NE                     |                      |     | .3   | 2.4   | .3    |       |       |       |       |       | 3.1        | 12.6         |
| ENE                    |                      | .7  | .7   | .3    |       |       |       |       |       |       | 1.7        | 9.2          |
| E                      |                      | .7  | .3   | 1.4   | .3    |       |       |       |       |       | 2.4        | 12.1         |
| ESE                    |                      |     | .7   | 1.7   |       |       |       | .3    |       |       | 2.8        | 15.1         |
| SE                     | .7                   | .3  | .3   | 1.0   | 1.0   |       |       |       |       |       | 3.1        | 12.1         |
| SSE                    |                      |     | .7   | 5.9   | 2.4   | .7    |       |       |       |       | 9.7        | 15.7         |
| S                      |                      | .3  | 2.4  | 9.3   | 2.4   | 2.4   | .7    |       |       |       | 17.6       | 15.6         |
| SSW                    |                      |     | 1.0  | 3.8   | .3    | .3    |       |       |       |       | 5.5        | 13.3         |
| SW                     |                      | .7  | 1.7  | 5.9   |       |       |       |       |       |       | 8.3        | 11.9         |
| WSW                    |                      | .7  | 1.7  | 4.8   | 2.1   |       |       |       |       |       | 9.3        | 13.5         |
| W                      |                      | 1.4 | 1.7  | 4.8   | .3    |       |       |       |       |       | 8.2        | 11.8         |
| WNW                    |                      | .7  | 1.0  | 3.5   | .3    |       |       |       |       |       | 5.5        | 12.1         |
| NW                     |                      | .7  |      | 2.4   | 1.0   |       |       |       |       |       | 4.2        | 14.3         |
| NNW                    |                      |     | .3   | 2.1   | .3    |       |       |       |       |       | 2.8        | 14.4         |
| VARIABLE               |                      |     |      |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////// |     |      |       |       |       |       |       |       |       | 9.7        | ////         |
| TOTALS                 | .3                   | 5.9 | 15.6 | 57.3  | 11.4  | 3.9   | .7    | .3    |       |       | 100.0      | 12.4         |

TOTAL NUMBER OF OBSERVATIONS: 289

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 27595 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 77-86  
MONTH: NOV HOURS(LST): 1500-1700

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |     |      |       |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|-----|------|-------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                  | 4-6 | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56 |            |              |
| N                      |                      | 1.4 | 1.4  | 4.4   | .3    |       |       |       |       |       |       | 7.4        | 11.1         |
| NNE                    |                      | .3  | .7   | 1.7   | .3    |       |       |       |       |       |       | 3.0        | 13.0         |
| NL                     |                      |     | .3   | 1.4   |       |       |       |       |       |       |       | 1.7        | 12.0         |
| NNE                    |                      | .7  |      | 1.0   |       |       |       |       |       |       |       | 1.4        | 11.0         |
| E                      |                      | .7  | .7   | 1.7   |       |       |       |       |       |       |       | 2.7        | 11.5         |
| ESE                    |                      | .7  | .7   | .3    |       |       |       |       |       |       |       | 1.4        | 9.0          |
| SE                     |                      | .7  | .7   | 2.7   | .7    |       |       |       |       |       |       | 4.4        | 12.8         |
| SSE                    |                      | .7  | 1.4  | 6.4   | 2.0   | .7    | .3    |       |       |       |       | 11.5       | 14.6         |
| S                      |                      |     | 2.7  | 8.4   | 3.4   | 1.7   | .3    |       |       |       |       | 16.6       | 15.4         |
| SSW                    |                      | .7  | 2.7  | 3.4   |       | .3    |       |       |       |       |       | 6.8        | 12.0         |
| SW                     |                      | .7  | 1.4  | 5.7   |       |       |       |       |       |       |       | 7.4        | 12.2         |
| WSW                    |                      | 1.7 | 1.7  | 4.4   | .7    |       |       |       |       |       |       | 7.8        | 11.8         |
| W                      |                      | 1.7 | 2.0  | 5.4   | 1.0   |       |       |       |       |       |       | 9.5        | 12.3         |
| WNW                    |                      |     | .7   | 3.4   | .3    |       |       |       |       |       |       | 4.4        | 14.2         |
| W                      |                      |     | .7   | 1.4   | .7    |       |       |       |       |       |       | 2.7        | 13.5         |
| NNW                    |                      |     | .7   | 1.0   | .3    | .7    |       | .3    |       |       |       | 3.0        | 18.0         |
| VARIABLE               |                      |     |      |       |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////// |     |      |       |       |       |       |       |       |       |       | 8.4        | ////         |
| TOTALS                 |                      | 6.4 | 18.2 | 52.7  | 9.8   | 3.4   | .7    | .3    |       |       |       | 100.0      | 12.1         |

TOTAL NUMBER OF OBSERVATIONS: 296

GLOBAL CLIMATOLOGY BRANCH  
USAF/ETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275950 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 77-86  
MONTH: NOV HOURS (LST): 1800-2300

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |     |      |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|-----|------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                  | 4-6 | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56      |              |
| N                      |                      |     | 2.7  | 2.4   | .7    |       |       |       |       |       | 5.8        | 11.6         |
| NNE                    |                      |     | .7   | 1.7   |       |       |       |       |       |       | 2.4        | 12.9         |
| NE                     |                      | .7  | .3   | 1.0   |       |       |       |       |       |       | 2.1        | 9.3          |
| ENE                    |                      | .3  | .7   | .7    |       |       |       |       |       |       | 1.7        | 10.4         |
| E                      |                      | .7  | .7   | .7    | .3    |       |       |       |       |       | 2.4        | 10.7         |
| ESE                    |                      |     | 1.7  | 2.1   |       |       |       |       |       |       | 3.8        | 10.5         |
| SE                     |                      |     | 2.1  | 1.7   | 1.0   |       |       |       |       |       | 4.8        | 13.2         |
| SSE                    |                      |     | 2.1  | 5.2   | 2.1   | 1.7   |       |       |       |       | 11.3       | 15.6         |
| S                      |                      | .3  | 2.4  | 7.0   | 3.4   | .3    | .3    |       |       |       | 14.0       | 14.4         |
| SSW                    |                      | 1.0 | 2.1  | 3.1   | .3    |       |       |       |       |       | 6.5        | 11.1         |
| SW                     |                      | 1.4 | .7   | 4.8   |       |       | .3    |       |       |       | 7.2        | 12.2         |
| WSW                    |                      | .3  | 1.7  | 4.5   | 1.0   | .3    |       |       |       |       | 7.9        | 13.1         |
| W                      |                      | 1.7 | 2.1  | 6.9   |       |       |       |       |       |       | 10.7       | 11.5         |
| WNW                    |                      | .7  | 1.4  | 1.7   |       |       |       |       |       |       | 3.4        | 11.2         |
| W                      |                      | .7  |      | 2.1   |       | .3    |       |       |       |       | 3.4        | 12.3         |
| NNW                    |                      |     | .7   | 1.4   | .3    | .7    |       | .3    |       |       | 3.4        | 17.4         |
| VARIABLE               |                      |     |      |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////// |     |      |       |       |       |       |       |       |       | 8.6        | ////         |
| TOTALS                 |                      | 7.9 | 22.0 | 47.8  | 9.3   | 3.4   | .7    | .3    |       |       | 100.0      | 11.9         |

TOTAL NUMBER OF OBSERVATIONS: 291

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AID WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275950 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 77-86  
MONTH: NOV HOURS (LST): 2100-2300

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |     |      |       |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|-----|------|-------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                  | 4-6 | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56 |            |              |
| N                      |                      |     | 1.3  | 2.7   | .3    |       | .3    |       |       |       |       | 4.7        | 13.4         |
| NNE                    |                      | 1.3 | 1.3  | 1.7   | .7    |       |       |       |       |       |       | 5.1        | 10.8         |
| NE                     |                      | .7  | 1.3  | .7    |       |       |       |       |       |       |       | 2.7        | 9.5          |
| NNE                    |                      |     | .7   | .7    |       |       |       |       |       |       |       | 1.3        | 10.5         |
| E                      |                      | 1.0 | .3   | 1.0   |       |       |       |       |       |       |       | 2.4        | 8.9          |
| ESE                    |                      |     | .7   | .7    |       |       |       |       |       |       |       | 1.3        | 11.0         |
| SE                     |                      | .7  | 1.7  | 2.4   | 1.0   | .3    |       |       |       |       |       | 6.1        | 13.0         |
| SSE                    |                      | .7  | 2.7  | 7.1   | 1.3   | .7    |       |       |       |       |       | 12.5       | 13.5         |
| S                      |                      | .7  | 2.0  | 7.1   | 2.7   | 2.7   |       |       |       |       |       | 14.8       | 15.4         |
| SSW                    |                      |     | 2.4  | 3.4   | .7    | .3    |       |       |       |       |       | 6.7        | 13.0         |
| SW                     |                      | 2.0 | 1.7  | 4.0   |       | .3    |       |       |       |       |       | 8.1        | 11.1         |
| WSW                    |                      | .7  | 1.7  | 2.7   |       |       |       |       |       |       |       | 5.1        | 11.1         |
| W                      |                      | .3  | 3.0  | 7.4   | .3    | .3    |       |       |       |       |       | 11.4       | 13.1         |
| WNW                    |                      | .7  | 2.0  | 1.3   | .3    |       |       |       |       |       |       | 4.4        | 10.5         |
| NW                     |                      |     | 1.0  | 1.0   | .7    | .3    |       |       |       |       |       | 3.0        | 14.6         |
| NNW                    |                      | .7  | .3   | 2.4   |       | .3    |       |       |       |       |       | 3.4        | 12.1         |
| VARIABLE               |                      |     |      |       |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////// |     |      |       |       |       |       |       |       |       |       | 7.1        | ////         |
| TOTALS                 |                      | 2.0 | 24.2 | 46.1  | 2.1   | 5.4   | .3    |       |       |       |       | 100.0      | 11.8         |

TOTAL NUMBER OF OBSERVATIONS: 277

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 273957 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 77-86  
MONTH: NOV HOURS(LST): ALL

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |     |      |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|-----|------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                  | 4-6 | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56      |              |
| N                      |                      | .6  | 1.6  | 2.8   | .4    |       | .0    |       |       |       | 5.5        | 11.8         |
| NNW                    |                      | .4  | .9   | 1.6   | .2    | .0    |       |       |       |       | 3.1        | 11.8         |
| NW                     |                      | .3  | .9   | 1.1   | .0    |       |       |       |       |       | 2.2        | 10.7         |
| NNNE                   |                      | .3  | .9   | .7    |       |       |       |       |       |       | 1.9        | 9.9          |
| N                      |                      | .4  | .6   | 1.0   | .1    |       |       |       |       |       | 2.2        | 10.9         |
| NNE                    |                      | .0  | 1.2  | .9    |       |       |       | .0    |       |       | 2.4        | 10.6         |
| SE                     | .0                   | .5  | 1.1  | 2.1   | .9    | .1    | .0    |       |       |       | 4.9        | 13.0         |
| SSE                    |                      | .5  | 1.6  | 5.0   | 2.1   | .3    | .1    |       |       |       | 11.0       | 14.4         |
| S                      | .1                   | .2  | 2.7  | 8.1   | 3.0   | 1.5   | .3    |       |       |       | 16.0       | 14.9         |
| SSW                    |                      | .5  | 2.1  | 3.2   | .5    | .2    | .0    |       |       |       | 6.6        | 12.3         |
| SW                     |                      | .9  | 1.6  | 4.2   | .2    | .1    | .3    |       |       |       | 7.1        | 12.0         |
| WSW                    |                      | .7  | 1.7  | 4.2   | .6    | .1    |       |       |       |       | 7.3        | 12.2         |
| W                      |                      | 1.7 | 2.2  | 5.5   | .6    | .1    | .0    |       |       |       | 9.5        | 12.3         |
| WNW                    |                      | .6  | 1.5  | 2.5   | .3    | .0    |       |       |       |       | 5.1        | 11.8         |
| NW                     |                      | .7  | .6   | 1.5   | .4    | .1    |       |       |       |       | 3.0        | 12.9         |
| NNW                    |                      | .7  | .7   | 1.6   | .3    | .3    | .1    | .1    |       |       | 3.4        | 14.3         |
| VARIABLE               |                      |     |      |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////// |     |      |       |       |       |       |       |       |       | 8.8        | ////         |
| TOTALS                 | .1                   | 7.7 | 22.0 | 47.3  | 9.7   | 3.6   | .7    | .1    |       |       | 100.0      | 11.7         |

TOTAL NUMBER OF OBSERVATIONS: 2326

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/DAL

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 27595 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 77-86  
MONTH: DEC HOURS (LST): 0000-0200

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |     |      |       |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|-----|------|-------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                  | 4-6 | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | 56-59 |            |              |
| N                      |                      | 1.7 | 1.0  | 0.0   |       |       |       |       |       |       |       | 4.7        | 10.5         |
| NNE                    |                      | 1.7 | 1.3  | 1.0   |       |       |       |       |       |       |       | 4.7        | 10.0         |
| NE                     |                      |     |      | 1.7   | 1.3   |       |       |       |       |       |       | 4.7        | 15.0         |
| NNE                    |                      |     | 1.3  | 1.7   |       |       |       |       |       |       |       | 4.7        | 17.0         |
| E                      |                      | 1.7 | 1.7  | 1.3   |       |       |       |       |       |       |       | 4.7        | 5.5          |
| ESE                    |                      | 1.7 | 1.7  | 2.7   | 1.3   |       |       |       |       |       |       | 6.7        | 11.7         |
| SE                     |                      | 1.0 | 2.7  | 2.3   | 1.3   | 1.3   |       |       |       |       |       | 7.7        | 12.3         |
| SSE                    |                      |     | 1.7  | 4.7   | 1.3   | 1.7   | 1.7   | 1.3   |       |       |       | 11.4       | 17.4         |
| S                      |                      |     | 2.7  | 7.7   | 1.7   | 1.7   | 1.7   |       |       |       |       | 13.7       | 15.0         |
| SSW                    |                      | 1.7 | 1.7  | 2.3   | 1.3   | 1.3   |       |       |       |       |       | 6.7        | 13.1         |
| SW                     |                      | 1.7 | 1.0  | 3.3   | 1.0   |       |       |       |       |       |       | 6.7        | 12.1         |
| WSW                    |                      | 1.0 | 1.3  | 3.3   | 1.7   | 1.3   |       |       |       |       |       | 6.7        | 12.5         |
| W                      |                      |     | 2.7  | 3.0   |       |       |       |       |       |       |       | 5.7        | 11.1         |
| WNW                    |                      | 1.0 | 1.0  | 3.7   |       | 1.3   |       |       |       |       |       | 6.7        | 12.2         |
| W                      |                      | 1.3 | 1.3  | 2.0   | 1.3   | 1.3   |       |       |       |       |       | 5.4        | 12.9         |
| WNW                    |                      | 1.3 | 1.3  | 1.0   |       |       |       |       |       |       |       | 2.7        | 10.8         |
| VARIABLE               |                      |     |      |       |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////// |     |      |       |       |       |       |       |       |       |       | 10.7       | ////         |
| TOTALS                 |                      | 7.7 | 21.4 | 45.8  | 9.4   | 4.3   | 1.3   | 1.3   |       |       |       | 100.0      | 11.7         |

TOTAL NUMBER OF OBSERVATIONS: 749

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 27591 STATION NAME: KAZAN U.S.R.

PERIOD OF RECORD: 77-86  
MONTH: DEC HOURS(IST): 0300-0500

| DIRECTION<br>(FOR GUSTS) | WIND SPEED IN KNOTS  |     |      |       |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|--------------------------|----------------------|-----|------|-------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                          | 1-3                  | 4-6 | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56 |            |              |
| N                        |                      |     | 1.7  | 0.6   |       | .3    |       |       |       |       |       | 4.6        | 12.5         |
| NNE                      |                      | .7  | .7   | 1.7   | .3    |       |       |       |       |       |       | 3.0        | 11.9         |
| NL                       |                      |     | .3   | .3    |       |       |       |       |       |       |       | .7         | 11.0         |
| ENE                      |                      |     | .7   | .7    |       |       |       |       |       |       |       | 1.7        | 10.0         |
| E                        |                      | 1.7 | .7   | .7    |       |       |       |       |       |       |       | 2.0        | 9.3          |
| ESE                      |                      | .7  | 1.7  | 1.3   | 1.0   |       |       |       |       |       |       | 6.3        | 12.6         |
| SE                       |                      | .7  | 1.7  | 4.3   | .7    | .2    | .3    |       |       |       |       | 7.6        | 14.0         |
| SSE                      |                      | .7  | 1.7  | 4.6   | 1.3   | 1.7   | .3    | .7    |       |       |       | 12.3       | 16.0         |
| S                        |                      | .7  | 1.0  | 7.6   | 1.7   | .7    | .3    | .3    |       |       |       | 12.3       | 15.5         |
| SSW                      |                      | .7  | 2.3  | 1.3   |       |       |       |       |       |       |       | 6.3        | 12.0         |
| SW                       |                      | .7  | .7   | 5.0   | 1.3   |       | .3    |       |       |       |       | 6.0        | 14.2         |
| WSW                      |                      | 1.7 | 1.7  | 1.7   | .3    |       |       |       |       |       |       | 6.3        | 11.2         |
| W                        |                      | 1.7 | 2.3  | 2.6   |       |       |       |       |       |       |       | 7.7        | 17.6         |
| WNW                      |                      |     | 1.3  | 3.3   |       | .3    |       |       |       |       |       | 5.0        | 13.5         |
| W                        |                      | .7  |      | 0.3   | 1.0   |       |       |       |       |       |       | 4.0        | 13.6         |
| NNW                      |                      | .7  | 1.3  | 0.0   |       |       |       |       |       |       |       | 1.6        | 11.8         |
| VARIABLE                 |                      |     |      |       |       |       |       |       |       |       |       |            |              |
| CALM                     | //////////////////// |     |      |       |       |       |       |       |       |       |       | 12.6       | ////         |
| TOTALS                   |                      | 7.7 | 19.9 | 47.0  | 7.6   | 3.3   | 1.3   | .7    |       |       |       | 100.0      | 11.6         |

TOTAL NUMBER OF OBSERVATIONS: 702

GLOBAL CLIMATOLOGY BRANCH  
USAFSTAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275250 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 77-86  
MONTH: DEC HOURS(EST): 0600-0600

| DIRECTION<br>(00-090) | WIND SPEED IN KNOTS  |     |      |       |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|-----------------------|----------------------|-----|------|-------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                       | 1-3                  | 4-6 | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56 |            |              |
| N                     |                      |     | 1.0  | 1.4   |       |       |       |       |       |       |       | 2.4        | 10.6         |
| NNE                   |                      | 1.7 | .7   | 1.0   | .7    |       |       |       |       |       |       | 3.4        | 11.9         |
| ENE                   |                      | .7  | .7   | 0.0   |       |       |       |       |       |       |       | 3.0        | 11.8         |
| E                     |                      | .7  | .7   | 1.0   |       |       |       |       |       |       |       | 2.0        | 10.3         |
| ESE                   |                      | 1.0 | 1.4  | 0.0   |       |       |       |       |       |       |       | 4.4        | 10.9         |
| SE                    |                      | .7  | 2.4  | 5.4   | 1.4   | .3    |       |       |       |       |       | 10.1       | 12.9         |
| SSE                   |                      |     | 2.4  | 5.7   | 2.4   | .3    | .3    |       |       |       |       | 11.1       | 14.3         |
| S                     |                      | .7  | 1.7  | 4.4   | 2.4   | .3    |       | .3    |       |       |       | 9.5        | 15.3         |
| SSW                   |                      |     | 1.4  | 4.1   |       | 1.7   |       |       |       |       |       | 6.4        | 14.4         |
| SW                    |                      | 1.0 | .3   | 1.0   | 1.0   |       |       |       |       |       |       | 5.4        | 13.7         |
| WSW                   |                      | 1.7 | 1.0  | 5.1   |       |       |       |       |       |       |       | 7.1        | 11.7         |
| W                     |                      | .7  | 4.4  | 7.0   | .3    |       |       |       |       |       |       | 8.4        | 10.7         |
| WNW                   |                      | 1.7 | 1.4  | 2.4   | .7    |       |       |       |       |       |       | 5.4        | 12.0         |
| NW                    |                      | 1.7 | 2.0  | 0.7   | .7    | .3    |       |       |       |       |       | 6.4        | 12.1         |
| NNW                   |                      | .7  | .3   | 1.7   | .3    |       |       |       |       |       |       | 3.7        | 13.1         |
| VARIABLE              |                      |     |      |       |       |       |       |       |       |       |       |            |              |
| CALM                  | //////////////////// |     |      |       |       |       |       |       |       |       |       | 11.9       | ////         |
| TOTALS                |                      | 7.1 | 21.3 | 44.5  | 9.8   | 2.4   | .3    | .3    |       |       |       | 100.0      | 11.3         |

TOTAL NUMBER OF OBSERVATIONS: 276

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 27090 STATION NAME: KAZAN, USSR

PERIOD OF RECORD: 77-86  
MONTH: DEC HOURS(LEST): 0900-1100

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |      |      |       |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                  | 4-6  | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | 56-59 |            |              |
| N                      |                      | 1.1  | .9   | 1.1   |       |       |       |       |       |       |       | 2.6        | 9.4          |
| NNE                    |                      | 1.4  | 1.1  | 1.8   | .7    |       |       |       |       |       |       | 5.0        | 11.1         |
| NEL                    |                      |      | .7   | .7    |       |       |       |       |       |       |       | 1.4        | 11.0         |
| ENE                    |                      |      |      |       |       |       |       |       |       |       |       |            |              |
| E                      |                      | .4   | 1.1  | 1.1   |       |       |       |       |       |       |       | 2.6        | 10.3         |
| ESE                    |                      | .4   | 2.8  | 2.2   | .4    |       |       |       |       |       |       | 6.7        | 11.1         |
| SE                     |                      | 1.1  | 1.4  | 2.8   | .4    |       |       |       |       |       |       | 5.7        | 10.9         |
| SSE                    |                      | .7   | 1.1  | 6.5   | 2.1   | 1.4   |       | .4    |       |       |       | 14.2       | 15.7         |
| S                      |                      | .4   | 2.1  | 7.8   | 1.4   | .7    |       |       |       |       |       | 13.5       | 13.0         |
| SSW                    |                      | .4   | 1.4  | 2.1   | .7    | .4    |       |       |       |       |       | 5.0        | 13.5         |
| SW                     |                      | .4   | .7   | 2.1   | .7    |       | .4    |       |       |       |       | 4.3        | 13.9         |
| WSW                    |                      | 1.4  | 1.4  | 3.5   | .4    |       | .4    |       |       |       |       | 7.1        | 10.1         |
| W                      |                      | .7   | 2.5  | 5.3   | .7    |       |       |       |       |       |       | 9.2        | 11.3         |
| WNW                    |                      | 1.1  | 1.4  | 1.8   | .7    |       |       |       |       |       |       | 5.0        | 10.9         |
| WNW                    |                      |      | 1.4  | 2.8   | .4    |       |       |       |       |       |       | 4.6        | 10.7         |
| NNW                    |                      | .4   | .4   | 1.8   | .4    |       |       |       |       |       |       | 2.8        | 10.6         |
| VARIABLE               |                      |      |      |       |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////// |      |      |       |       |       |       |       |       |       |       | 10.6       | ////         |
| TOTALS                 |                      | 10.6 | 19.9 | 46.5  | 8.9   | 2.5   | .7    | .4    |       |       |       | 100.0      | 11.2         |

TOTAL NUMBER OF OBSERVATIONS: 210

GLOBAL CLIMATOLOGY BRANCH  
USAF/CLAC  
AIR WEATHER SERVICE/MSC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275757 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 77-86  
MONTH: DEC HOURS(IST): 1200-1400

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |     |      |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|-----|------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                  | 4-6 | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | 56         |              |
| N                      |                      | 1.7 | .7   | .3    |       |       |       |       |       |       | 2.0        | 7.7          |
| NNE                    |                      | .7  | 1.3  | 1.3   | .3    | .3    |       |       |       |       | 3.7        | 12.4         |
| NE                     |                      | .7  | 1.3  | 1.0   |       |       |       |       |       |       | 2.7        | 10.8         |
| NNE                    |                      | .7  |      |       |       |       |       |       |       |       | .7         | 4.0          |
| E                      |                      | .7  | .3   | .7    |       |       |       |       |       |       | 1.3        | 10.5         |
| ESE                    |                      | .7  | 1.0  | 1.7   | .3    |       |       |       |       |       | 3.4        | 11.7         |
| SE                     |                      | .7  | 1.7  | 3.4   | 1.0   | .3    |       |       |       |       | 7.0        | 13.0         |
| SSE                    |                      |     | 1.0  | 2.4   | 2.3   | 1.7   |       |       |       |       | 12.4       | 15.3         |
| S                      |                      | .7  | 2.0  | 6.0   | 1.0   | 1.0   | .3    |       |       |       | 10.7       | 14.3         |
| SSW                    |                      | .7  | 2.7  | 3.4   | 1.3   | .3    |       |       |       |       | 8.4        | 13.1         |
| SW                     |                      | 1.7 | 1.3  | 4.7   | 1.3   | .3    |       |       |       |       | 8.7        | 13.0         |
| WSW                    |                      | .7  | 1.3  | 3.4   |       | .3    |       |       |       |       | 5.7        | 12.1         |
| W                      |                      |     | 2.3  | 5.4   | 1.0   |       | .3    |       |       |       | 9.1        | 13.3         |
| WNW                    |                      | .7  | 1.7  | 2.7   | .7    |       |       |       |       |       | 5.4        | 11.8         |
| WW                     |                      | 1.0 | 1.0  | 2.3   | .3    |       |       |       |       |       | 4.7        | 10.6         |
| NW                     |                      | .7  | .7   | 2.3   | .7    |       |       |       |       |       | 4.0        | 12.3         |
| VARIABLE               |                      |     |      |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////// |     |      |       |       |       |       |       |       |       | 10.1       | ////         |
| TOTALS                 |                      | 7.7 | 20.5 | 47.7  | 10.4  | 3.7   | .7    |       |       |       | 100.0      | 11.6         |

TOTAL NUMBER OF OBSERVATIONS: 248

GLOBAL CLIMATOLOGY BRANCH  
USAF/CIAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275950 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 77-86  
MONTH: DEC HOURS(UST): 1500-1700

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |      |      |       |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                  | 4-6  | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56 |            |              |
| N                      |                      | .7   | .3   | 2.6   | .7    |       |       |       |       |       |       | 3.3        | 12.8         |
| NNE                    |                      | .3   | .7   | .7    | .7    |       |       |       |       |       |       | 2.3        | 12.3         |
| N                      |                      | .7   | 1.0  | .7    |       |       |       |       |       |       |       | 2.3        | 9.7          |
| E                      |                      |      |      |       |       |       |       |       |       |       |       | 1.0        | 6.0          |
| ESE                    |                      | .7   | .3   | 2.0   |       |       |       |       |       |       |       | 2.6        | 12.5         |
| E                      |                      | .7   | 1.6  | 2.0   |       |       |       |       |       |       |       | 3.9        | 10.7         |
| SE                     |                      | .7   | .7   | 3.3   | .3    |       |       |       |       |       |       | 4.6        | 12.8         |
| SSE                    |                      | .7   | 2.7  | 6.6   | 2.0   | 1.6   |       |       |       |       |       | 12.9       | 15.3         |
| S                      |                      | .7   | 1.3  | 7.9   | 1.3   | 1.0   | .3    |       |       |       |       | 12.1       | 14.4         |
| SSW                    |                      | .7   | .3   | 6.6   | 1.0   | .3    |       |       |       |       |       | 8.9        | 14.1         |
| SW                     |                      | .7   | 1.3  | 3.3   | .3    |       |       | .3    |       |       |       | 5.9        | 13.2         |
| WSW                    |                      | .7   | 2.3  | 2.0   |       |       |       |       |       |       |       | 5.9        | 10.6         |
| W                      |                      | 1.0  | 2.6  | 5.9   | 1.6   |       |       |       |       |       |       | 11.1       | 12.6         |
| WNW                    |                      | 1.3  | 1.0  | 1.3   |       |       |       |       |       |       |       | 3.6        | 9.3          |
| W                      |                      | 1.3  | .7   | 3.0   | .7    |       |       |       |       |       |       | 5.6        | 11.4         |
| WNW                    |                      | 1.0  | .3   | 1.0   |       |       |       |       |       |       |       | 2.3        | 10.0         |
| VARIABLE               |                      |      |      |       |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////// |      |      |       |       |       |       |       |       |       |       | 11.8       | ////         |
| TOTALS                 |                      | 10.5 | 16.7 | 48.9  | 8.5   | 3.0   | .7    | .3    |       |       |       | 100.0      | 11.3         |

TOTAL NUMBER OF OBSERVATIONS: 305

GLOBAL CLIMATOLOGY BRANCH  
USAFITAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 270900 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 77-86  
MONTH: DEC HOURS(LST): 1800-2000

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |     |      |       |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|-----|------|-------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-7                  | 4-6 | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | 56-66 |            |              |
| N                      |                      | .7  | .3   | 2.0   | .3    |       | .3    |       |       |       |       | 3.7        | 13.1         |
| NNE                    |                      |     |      | 1.0   |       |       |       |       |       |       |       | 1.0        | 13.3         |
| NE                     |                      | .7  | .7   | 1.3   |       |       |       |       |       |       |       | 2.3        | 11.1         |
| ENE                    |                      | .7  |      | .7    |       |       |       |       |       |       |       | 1.0        | 11.3         |
| E                      |                      | .7  | 1.0  | .7    |       |       |       |       |       |       |       | 2.3        | 9.7          |
| ESE                    |                      | .3  | 1.0  | 2.3   |       |       |       |       |       |       |       | 3.7        | 11.8         |
| SE                     |                      | .7  | 2.3  | 5.6   | .3    | 1.7   | .3    |       |       |       |       | 10.3       | 13.6         |
| SSE                    |                      | .7  | 2.0  | 6.0   | 1.3   | .3    | .3    |       |       |       |       | 10.6       | 14.2         |
| S                      |                      |     | 2.0  | 9.0   | 1.3   | .7    | .3    | .3    |       |       |       | 12.6       | 15.4         |
| SSW                    |                      |     | 3.3  | 4.0   | .7    |       |       |       |       |       |       | 8.0        | 12.3         |
| SW                     |                      | 1.7 | 1.3  | 3.7   |       | .7    | .3    |       |       |       |       | 6.7        | 12.6         |
| WSW                    |                      | .7  | 1.0  | 2.3   | .7    |       |       |       |       |       |       | 4.7        | 12.3         |
| W                      |                      | 1.3 | 2.3  | 6.0   |       | .3    |       |       |       |       |       | 10.0       | 11.8         |
| WNW                    |                      | .7  | 1.0  | 1.3   | .7    |       |       |       |       |       |       | 3.3        | 12.2         |
| NW                     |                      |     | 1.7  | 2.3   | .3    |       |       |       |       |       |       | 4.3        | 12.5         |
| NNW                    |                      | 1.0 | 1.3  | 1.3   |       |       |       |       |       |       |       | 3.7        | 9.1          |
| VARIABLE               |                      |     |      |       |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////// |     |      |       |       |       |       |       |       |       |       | 12.6       | ////         |
| TOTALS                 |                      | 5.7 | 21.2 | 47.5  | 5.6   | 2.7   | 1.7   | .3    |       |       |       | 103.0      | 11.3         |

TOTAL NUMBER OF OBSERVATIONS: 701

GLOBAL CLIMATOLOGY BRANCH  
USAF/ETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 273950 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 77-86  
MONTH: DEC HOURS(IST): 2100-2300

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |     |      |       |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|-----|------|-------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-3                  | 4-6 | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56 |            |              |
| N                      |                      |     | 2.6  | 1.0   | .3    |       |       |       |       |       |       | 3.9        | 10.9         |
| NNE                    |                      | .7  | .3   | 2.0   |       |       |       |       |       |       |       | 3.0        | 10.9         |
| NE                     |                      |     | .3   | 1.6   |       |       |       |       |       |       |       | 2.0        | 13.3         |
| NNE                    |                      | .7  | .3   | .3    |       |       |       |       |       |       |       | 1.0        | 8.0          |
| E                      |                      |     | .3   | .7    | .3    |       |       |       |       |       |       | 1.3        | 12.8         |
| ESE                    |                      |     | 3.3  | 2.3   | .7    |       |       |       |       |       |       | 6.2        | 11.9         |
| SE                     |                      | .3  | 1.6  | 3.0   |       | .3    | .3    |       |       |       |       | 5.6        | 13.5         |
| SSE                    |                      | 1.7 | 1.6  | 6.6   | 2.6   | 1.0   | .7    | .3    |       |       |       | 13.8       | 15.4         |
| S                      |                      | 2.3 | 3.0  | 8.2   | 1.6   | .7    | .3    |       |       |       |       | 15.1       | 13.7         |
| SSW                    | .3                   | .7  | 2.6  | 1.6   | 1.3   | 1.0   |       |       |       |       |       | 7.5        | 13.1         |
| SW                     |                      | .7  | 2.3  | 2.6   |       |       |       |       |       |       |       | 5.6        | 10.8         |
| WSW                    |                      | 1.7 | 1.0  | 2.3   | .3    |       |       |       |       |       |       | 4.6        | 11.4         |
| W                      |                      |     | 2.3  | 4.9   | .3    |       |       |       |       |       |       | 7.5        | 12.4         |
| WNW                    |                      | .7  | 1.3  | 2.3   |       | .3    |       |       |       |       |       | 5.2        | 12.4         |
| NW                     |                      | .7  | 1.6  | 1.6   |       |       |       |       |       |       |       | 4.9        | 10.5         |
| NNW                    |                      | .7  | 1.0  | .7    |       |       |       |       |       |       |       | 2.0        | 9.3          |
| VARIABLE               |                      |     |      |       |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////// |     |      |       |       |       |       |       |       |       |       | 10.8       | ////         |
| TOTALS                 | .7                   | 7.7 | 25.6 | 47.6  | 7.5   | 3.3   | 1.7   | .3    |       |       |       | 100.0      | 11.3         |

TOTAL NUMBER OF OBSERVATIONS: 335

GLOBAL CLIMATOLOGY BRANCH  
USAF/ETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275200 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 77-86  
MONTH: DEC HOURS(EST): ALL

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |      |       |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-7                  | 8-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 | GE 56 |            |              |
| N                      |                      | .1   | 1.0   | 1.5   | .2    | .3    | .0    |       |       |       | 3.4        | 11.3         |
| NNE                    |                      | .5   | .8    | 1.3   | .3    | .7    |       |       |       |       | 3.0        | 11.6         |
| NE                     |                      | .2   | .6    | 1.0   | .0    |       |       |       |       |       | 1.9        | 11.5         |
| EAE                    |                      | .3   | .2    | .4    |       |       |       |       |       |       | .8         | 9.9          |
| E                      |                      | .1   | .5    | .9    | .0    |       |       |       |       |       | 1.2        | 10.6         |
| ESE                    |                      | .4   | 1.8   | 2.6   | .3    |       |       |       |       |       | 5.1        | 11.6         |
| SE                     |                      | .7   | 1.8   | 3.8   | .7    | .3    | .1    |       |       |       | 7.3        | 13.0         |
| SSE                    |                      | .4   | 1.6   | 6.9   | 1.9   | 1.1   | .3    | .2    |       |       | 12.4       | 15.5         |
| S                      |                      | .5   | 2.0   | 7.2   | 1.5   | .9    | .3    | .1    |       |       | 12.4       | 14.5         |
| SSW                    | .7                   | .4   | 2.0   | 3.4   | .8    | .4    |       |       |       |       | 7.0        | 13.2         |
| SW                     |                      | .9   | 1.1   | 3.1   | .7    | .1    | .1    | .7    |       |       | 6.1        | 12.9         |
| WSW                    |                      | .7   | 1.4   | 3.2   | .3    | .1    | .7    |       |       |       | 6.0        | 11.7         |
| W                      |                      | .5   | 2.6   | 4.5   | .5    | .7    | .7    |       |       |       | 8.5        | 11.8         |
| WNW                    |                      | .7   | 1.3   | 2.5   | .3    | .1    |       |       |       |       | 4.9        | 11.9         |
| W                      |                      | .6   | 1.2   | 2.6   | .5    | .1    |       |       |       |       | 5.0        | 12.0         |
| WNW                    |                      | .5   | .5    | 1.5   | .2    |       |       |       |       |       | 3.0        | 11.2         |
| VARIABLE               |                      |      |       |       |       |       |       |       |       |       |            |              |
| CALM                   | //////////////////// |      |       |       |       |       |       |       |       |       | 11.4       | ////         |
| TOTALS                 |                      | 1.6  | 20.8  | 46.4  | 8.3   | 3.1   | 1.0   | .3    |       |       | 100.0      | 11.4         |

TOTAL NUMBER OF OBSERVATIONS: 2368

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275957 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 77-87  
MONTH: ALL HOURS(IST): ALL

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS                  |      |      |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |       |
|------------------------|--------------------------------------|------|------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|-------|
|                        | 1-3                                  | 4-6  | 7-10 | 11-16 | 17-21 | 22-27 | 28-33 | 34-40 | 41-47 | 48-55 |            |              | GE 56 |
| N                      | .0                                   | 1.1  | 2.0  | 2.6   | .4    | .0    | .0    | .0    |       |       |            | 6.1          | 11.0  |
| NNE                    |                                      | .7   | 1.3  | 1.5   | .2    | .0    |       |       |       |       |            | 3.7          | 10.8  |
| NE                     | .0                                   | .6   | 1.2  | 1.2   | .1    | .0    | .0    |       |       |       |            | 3.2          | 10.3  |
| ENE                    | .0                                   | .4   | 1.2  | 1.0   | .1    | .0    | .0    |       |       |       |            | 2.6          | 10.3  |
| E                      |                                      | .7   | 1.6  | 1.4   | .1    | .0    |       |       |       |       |            | 3.8          | 10.3  |
| ESE                    |                                      | .6   | 1.6  | 1.7   | .1    | .0    | .0    | .0    |       |       |            | 4.1          | 10.6  |
| SE                     | .0                                   | .7   | 2.0  | 2.7   | .4    | .1    | .0    |       |       |       |            | 6.0          | 11.7  |
| SSE                    | .0                                   | .9   | 2.2  | 3.8   | .7    | .3    | .1    | .0    | .0    |       |            | 7.9          | 12.6  |
| S                      | .0                                   | .9   | 2.4  | 4.6   | .9    | .3    | .1    | .0    |       |       |            | 9.3          | 12.6  |
| SSW                    | .0                                   | .6   | 1.6  | 2.4   | .3    | .1    | .0    | .0    |       |       |            | 5.1          | 11.8  |
| SW                     | .0                                   | .0   | 1.4  | 2.0   | .2    | .1    | .0    | .0    |       |       |            | 4.6          | 11.0  |
| WSW                    |                                      | .9   | 1.5  | 2.4   | .3    | .1    | .0    | .0    |       |       |            | 5.1          | 11.4  |
| W                      | .0                                   | 1.1  | 2.2  | 4.0   | .4    | .1    | .0    |       |       |       |            | 7.8          | 11.6  |
| WNW                    | .0                                   | .7   | 1.5  | 2.5   | .3    | .1    | .0    |       |       |       |            | 5.1          | 11.5  |
| W                      |                                      | .7   | 1.5  | 2.2   | .4    | .1    | .0    | .0    |       |       |            | 4.8          | 11.5  |
| NNW                    |                                      | .9   | 1.8  | 2.3   | .3    | .1    | .0    | .0    |       |       |            | 5.3          | 11.1  |
| VARIABLE               |                                      | .0   |      |       |       |       |       |       |       |       |            | .0           | 6.0   |
| CALM                   | //////////////////////////////////// |      |      |       |       |       |       |       |       |       |            | 15.5         | ////  |
| TOTALS                 | .1                                   | 10.7 | 26.8 | 36.3  | 5.2   | 1.4   | .3    | .1    | .0    |       |            | 100.0        | 9.7   |

TOTAL NUMBER OF OBSERVATIONS: 28373

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SURFACE WIND DIRECTION VERSUS WIND SPEED  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 27995 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 77-87  
MONTH: ALL HOURS (LST): ALL

CEILING: 200 TO 1400 FEET WITH VISIBILITIES 1/2 MILE OR MORE  
AND/OR  
CEILING: 200 FEET OR MORE WITH VISIBILITIES 1/2 TO 3-1/2 MILES

| DIRECTION<br>(DEGREES) | WIND SPEED IN KNOTS  |      |       |       |       |       |       |       |       |       | TOTAL<br>% | MEAN<br>WIND |
|------------------------|----------------------|------|-------|-------|-------|-------|-------|-------|-------|-------|------------|--------------|
|                        | 1-5                  | 6-10 | 11-15 | 16-20 | 21-25 | 26-30 | 31-35 | 36-40 | 41-45 | 46-50 |            |              |
| N                      |                      | .0   | 1.5   | 1.8   | .4    | .1    | .0    |       |       |       | 4.6        | 11.3         |
| NNE                    |                      | .0   | .9    | 1.4   | .3    | .0    |       |       |       |       | 3.1        | 11.7         |
| NF                     | .1                   | .0   | .8    | 1.5   | .1    | .0    |       |       |       |       | 2.9        | 11.4         |
| NNE                    |                      | .1   | 1.0   | 1.6   | .1    | .0    |       |       |       |       | 2.3        | 11.1         |
| E                      |                      | .0   | 1.1   | 1.6   | .2    | .0    |       |       |       |       | 3.4        | 11.2         |
| ESE                    |                      | .0   | 1.1   | 1.5   | .1    | .0    | .0    |       |       |       | 3.3        | 11.1         |
| SE                     | .1                   | .0   | 1.5   | 3.7   | .5    | .0    | .0    |       |       |       | 6.4        | 12.8         |
| ESE                    |                      | .0   | 1.9   | 5.2   | 1.4   | .5    | .2    | .0    | .0    |       | 9.9        | 14.1         |
| S                      | .1                   | .0   | 2.3   | 7.3   | 1.9   | .7    | .1    | .0    |       |       | 13.3       | 13.7         |
| SSW                    | .0                   | .0   | 1.6   | 3.2   | .6    | .0    | .0    | .0    |       |       | 6.1        | 12.7         |
| SW                     | .1                   | .0   | 1.3   | 2.7   | .3    | .1    | .0    |       |       |       | 5.0        | 11.7         |
| WSW                    |                      | .7   | 1.2   | 2.9   | .3    | .1    | .0    |       |       |       | 5.3        | 11.9         |
| W                      |                      | 1.1  | 2.1   | 4.0   | .4    | .1    | .0    |       |       |       | 7.7        | 11.7         |
| WNW                    |                      | .0   | 1.7   | 2.0   | .3    | .1    |       |       |       |       | 4.7        | 11.5         |
| W                      |                      | .0   | 1.1   | 2.0   | .3    | .1    |       |       |       |       | 4.1        | 11.6         |
| WNW                    |                      | .0   | 1.6   | 1.7   | .2    | .1    |       | .0    |       |       | 4.4        | 10.9         |
| VARIABLE               |                      |      |       |       |       |       |       |       |       |       |            |              |
| CALC                   | //////////////////// |      |       |       |       |       |       |       |       |       | 13.4       | ////         |
| TOTALS                 | .1                   | 3.9  | 22.8  | 43.7  | 7.4   | 2.4   | .4    | .1    | .0    |       | 100.0      | 10.7         |

TOTAL NUMBER OF OBSERVATIONS: 77.2

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## CEILING VERSUS VISIBILITY AND SKY COVER SUMMARIES

### CEILING VERSUS VISIBILITY SUMMARY

THIS SUMMARY IS A BIVARIATE FREQUENCY DISTRIBUTION BY CLASSES OF CEILING FROM "0" THROUGH EQUAL TO OR GREATER THAN 20,000 FEET AND AS A SEPARATE CLASS "NO CEILING", VERSUS VISIBILITY IN 16 CLASSES FROM ZERO THROUGH EQUAL TO OR GREATER THAN 10 MILES.

DATA DERIVED FROM HOURLY OBSERVATIONS.

FREQUENCY DISTRIBUTION PRESENTED BY THE STANDARD 3-HOUR TIME GROUPS BY MONTH, MONTHLY AND ANNUALLY (ALL YEARS COMBINED).

#### NOTES:

BEGINNING IN 1958, METAR STATIONS REPORTED VISIBILITIES TO 6 MILES AND GREATER THAN 6 MILES. THEREFORE THE COLUMN FOR VISIBILITIES EQUAL TO OR GREATER THAN 10 MILES APPEAR BLANK.

AS A RULE, AIRWAYS STATIONS NORMALLY REPORT VISIBILITIES TO 6 MILES AND 7 OR GREATER, HOWEVER SOME STATIONS REPORT HIGHER VALUES. THEREFORE, THE 10 MILE VISIBILITY COLUMN SOMETIMES CONTAIN SMALL PERCENTAGE VALUES. HOWEVER, THESE VALUES ARE OF LITTLE MEANING AND SHOULD BE DISREGARDED.

FOR METAR CIVILIAN STATIONS REPORTING "CAVOK", ALL CEILINGS ABOVE 5000 FEET WERE SUPPRESSED TO 5000 FEET. THEREFORE, NO PERCENT VALUES APPEAR ABOVE 5000 FEET.

### SKY COVER SUMMARY

PRESENTS PERCENTAGES OF SKY COVER IN EITHER 10THS OF COVERAGE OR "AIRWAYS CLASSIFICATIONS".

DATA SUMMARIZED BY THE STANDARD 3-HOUR TIME GROUPS BY MONTH, MONTHLY AND ANNUALLY (ALL YEARS COMBINED).

ALSO PRESENTED ARE MEAN SKY COVERS.

FOR AIRWAY STATIONS, THE CONVERSION FROM THE AIRWAYS DESIGNATIONS TO 10THS FOR PRESENTATION ARE:

|           |   |       |
|-----------|---|-------|
| CLEAR     | - | 0/10  |
| SCATTERED | - | 3/10  |
| BROKEN    | - | 4/10  |
| OVERCAST  | - | 10/10 |
| OBSCURED  | - | 10/10 |

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/HAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275957 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: JAN HOURS(LST): 0000-0200

| CEILING<br>IN<br>FEET | VISIBILITY IN STATUTE MILES |       |      |      |      |       |      |          |          |      |        |        |        |         |        |       |
|-----------------------|-----------------------------|-------|------|------|------|-------|------|----------|----------|------|--------|--------|--------|---------|--------|-------|
|                       | 1                           | GE 10 | GE 5 | GE 4 | GE 3 | 2 1/2 | GE 2 | GE 1 1/2 | GE 1 1/4 | GE 1 | GE 3/4 | GE 5/8 | GE 1/2 | GE 5/16 | GE 1/4 | GE 0  |
| NO CEIL               |                             | 17.6  | 17.6 | 17.6 | 18.6 | 20.6  | 20.6 | 20.9     | 22.0     | 22.0 | 22.0   | 22.6   | 22.6   | 23.3    | 23.3   | 23.3  |
| GE 2000               |                             | 18.6  | 18.6 | 18.6 | 19.6 | 21.6  | 21.6 | 22.0     | 23.0     | 23.0 | 23.0   | 23.6   | 23.6   | 24.3    | 24.3   | 24.3  |
| GE 1800               |                             | 18.6  | 18.6 | 18.6 | 19.6 | 21.6  | 21.6 | 22.0     | 23.0     | 23.0 | 23.0   | 23.6   | 23.6   | 24.3    | 24.3   | 24.3  |
| GE 1600               |                             | 18.6  | 18.6 | 18.6 | 19.6 | 21.6  | 21.6 | 22.0     | 23.0     | 23.0 | 23.0   | 23.6   | 23.6   | 24.3    | 24.3   | 24.3  |
| GE 1400               |                             | 18.6  | 18.6 | 18.6 | 19.6 | 21.6  | 21.6 | 22.0     | 23.0     | 23.0 | 23.0   | 23.6   | 23.6   | 24.3    | 24.3   | 24.3  |
| GE 1200               |                             | 18.6  | 18.6 | 18.6 | 19.6 | 21.6  | 21.6 | 22.0     | 23.0     | 23.0 | 23.0   | 23.6   | 23.6   | 24.3    | 24.3   | 24.3  |
| GE 1000               |                             | 29.1  | 29.1 | 29.1 | 32.4 | 35.1  | 35.1 | 37.5     | 39.5     | 39.9 | 40.6   | 41.2   | 41.2   | 42.2    | 42.2   | 42.2  |
| GE 900                |                             | 29.1  | 29.1 | 29.1 | 32.4 | 35.1  | 35.1 | 37.5     | 39.5     | 39.9 | 40.6   | 41.2   | 41.2   | 42.2    | 42.2   | 42.2  |
| GE 800                |                             | 29.1  | 29.1 | 29.1 | 32.4 | 35.1  | 35.1 | 37.5     | 39.5     | 39.9 | 40.6   | 41.2   | 41.2   | 42.2    | 42.2   | 42.2  |
| GE 700                |                             | 29.1  | 29.1 | 29.1 | 32.4 | 35.1  | 35.1 | 37.5     | 39.5     | 39.9 | 40.6   | 41.2   | 41.2   | 42.2    | 42.2   | 42.2  |
| GE 600                |                             | 29.1  | 29.1 | 29.1 | 32.4 | 35.1  | 35.1 | 37.5     | 39.5     | 39.9 | 40.6   | 41.2   | 41.2   | 42.2    | 42.2   | 42.2  |
| GE 500                |                             | 29.7  | 29.7 | 29.7 | 33.1 | 35.5  | 35.8 | 38.2     | 40.2     | 40.5 | 41.2   | 41.9   | 41.9   | 42.9    | 42.9   | 42.9  |
| GE 400                |                             | 33.4  | 33.4 | 33.4 | 33.8 | 36.5  | 36.5 | 38.9     | 40.9     | 41.2 | 41.9   | 42.6   | 42.6   | 43.6    | 43.6   | 43.6  |
| GE 300                |                             | 33.4  | 33.4 | 33.4 | 33.8 | 36.5  | 36.5 | 38.9     | 40.9     | 41.2 | 41.9   | 42.6   | 42.6   | 43.6    | 43.6   | 43.6  |
| GE 200                |                             | 33.4  | 33.4 | 33.4 | 33.8 | 36.5  | 36.5 | 38.9     | 40.9     | 41.2 | 41.9   | 42.6   | 42.6   | 43.6    | 43.6   | 43.6  |
| GE 100                |                             | 34.1  | 34.1 | 34.1 | 37.8 | 41.2  | 41.2 | 44.3     | 46.6     | 47.0 | 47.6   | 48.3   | 48.3   | 49.3    | 49.3   | 49.3  |
| GE 0                  |                             | 37.2  | 37.2 | 37.2 | 41.9 | 45.3  | 45.3 | 48.3     | 51.0     | 51.4 | 52.0   | 52.7   | 52.7   | 53.7    | 53.7   | 53.7  |
| GE 0                  |                             | 41.5  | 41.5 | 41.5 | 45.6 | 50.0  | 50.0 | 53.0     | 56.4     | 56.8 | 57.4   | 58.1   | 58.1   | 59.1    | 59.1   | 59.1  |
| GE 0                  |                             | 43.2  | 43.2 | 43.2 | 47.7 | 54.7  | 55.1 | 58.8     | 62.5     | 63.2 | 63.9   | 64.5   | 64.5   | 65.5    | 65.5   | 65.9  |
| GE 0                  |                             | 44.6  | 44.6 | 44.6 | 51.7 | 57.4  | 57.8 | 61.8     | 65.9     | 66.6 | 67.2   | 67.9   | 67.9   | 68.9    | 68.9   | 69.3  |
| GE 0                  |                             | 46.3  | 46.3 | 46.3 | 53.4 | 59.1  | 59.5 | 63.5     | 67.6     | 68.2 | 68.9   | 69.6   | 69.6   | 70.6    | 70.6   | 70.9  |
| GE 0                  |                             | 48.0  | 48.0 | 48.0 | 55.4 | 61.5  | 61.8 | 66.6     | 70.9     | 71.6 | 72.2   | 73.0   | 73.0   | 74.0    | 74.0   | 74.3  |
| GE 0                  |                             | 51.0  | 51.0 | 51.0 | 58.1 | 64.9  | 65.5 | 70.3     | 74.7     | 75.3 | 76.0   | 76.7   | 76.7   | 77.7    | 77.7   | 78.0  |
| GE 0                  |                             | 53.0  | 53.0 | 53.0 | 52.5 | 70.6  | 71.6 | 76.7     | 81.3     | 83.4 | 84.0   | 84.6   | 84.6   | 87.5    | 87.5   | 87.8  |
| GE 0                  |                             | 53.4  | 53.4 | 53.4 | 62.8 | 71.9  | 72.0 | 77.4     | 82.1     | 85.1 | 86.6   | 87.8   | 87.8   | 89.2    | 89.2   | 89.5  |
| GE 0                  |                             | 54.1  | 54.1 | 54.1 | 63.5 | 72.0  | 73.0 | 78.7     | 86.5     | 88.9 | 90.2   | 91.6   | 91.6   | 93.2    | 93.2   | 93.6  |
| GE 0                  |                             | 54.1  | 54.1 | 54.1 | 63.5 | 72.0  | 73.0 | 79.4     | 87.5     | 89.9 | 91.6   | 92.9   | 93.6   | 94.9    | 94.9   | 95.6  |
| GE 0                  |                             | 54.1  | 54.1 | 54.1 | 63.5 | 72.0  | 73.0 | 79.4     | 89.2     | 90.9 | 92.6   | 94.3   | 95.3   | 97.0    | 97.3   | 98.3  |
| GE 0                  |                             | 54.1  | 54.1 | 54.1 | 63.5 | 72.0  | 73.0 | 79.4     | 88.0     | 90.9 | 92.6   | 94.3   | 95.3   | 97.0    | 97.6   | 99.7  |
| GE 0                  |                             | 54.1  | 54.1 | 54.1 | 63.5 | 72.0  | 73.0 | 79.4     | 88.2     | 90.9 | 92.6   | 94.3   | 95.3   | 97.0    | 97.6   | 100.0 |

TOTAL NUMBER OF OBSERVATIONS: 296

GLOBAL CLIMATOLOGY BRANCH  
USAF/CLAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 27565 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: JAN HOURS (LST): 0300-0500

| CEILING<br>IN<br>FEET | VISIBILITY IN STATUTE MILES |             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |
|-----------------------|-----------------------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|----------|----------|----------|----------|----------|----------|
|                       | GE<br>1                     | GE<br>1 1/2 | GE<br>2 | GE<br>3 | GE<br>4 | GE<br>5 | GE<br>6 | GE<br>7 | GE<br>8 | GE<br>9 | GE<br>10 | GE<br>11 | GE<br>12 | GE<br>13 | GE<br>14 | GE<br>15 |
| NO CEIL               |                             | 19.1        | 19.1    | 19.4    | 19.4    | 20.1    | 20.1    | 20.4    | 21.1    | 21.4    | 21.7     | 21.7     | 22.4     | 22.4     | 22.4     | 22.7     |
| GE 20000              | 20.1                        | 20.1        | 20.4    | 20.4    | 21.1    | 21.1    | 21.4    | 22.1    | 22.4    | 22.7    | 22.7     | 23.4     | 23.4     | 23.4     | 23.7     | 23.7     |
| GE 18000              | 20.1                        | 20.1        | 20.4    | 20.4    | 21.1    | 21.1    | 21.4    | 22.1    | 22.4    | 22.7    | 22.7     | 23.4     | 23.4     | 23.4     | 23.7     | 23.7     |
| GE 16000              | 20.1                        | 20.1        | 20.4    | 20.4    | 21.1    | 21.1    | 21.4    | 22.1    | 22.4    | 22.7    | 22.7     | 23.4     | 23.4     | 23.4     | 23.7     | 23.7     |
| GE 14000              | 20.1                        | 20.1        | 20.4    | 20.4    | 21.1    | 21.1    | 21.4    | 22.1    | 22.4    | 22.7    | 22.7     | 23.4     | 23.4     | 23.4     | 23.7     | 23.7     |
| GE 12000              | 20.1                        | 20.1        | 20.4    | 20.4    | 21.1    | 21.1    | 21.4    | 22.1    | 22.4    | 22.7    | 22.7     | 23.4     | 23.4     | 23.4     | 23.7     | 23.7     |
| GE 10000              | 20.1                        | 20.1        | 20.4    | 20.4    | 21.1    | 21.1    | 21.4    | 22.1    | 22.4    | 22.7    | 22.7     | 23.4     | 23.4     | 23.4     | 23.7     | 23.7     |
| GE 9000               | 20.1                        | 20.1        | 20.4    | 20.4    | 21.1    | 21.1    | 21.4    | 22.1    | 22.4    | 22.7    | 22.7     | 23.4     | 23.4     | 23.4     | 23.7     | 23.7     |
| GE 8000               | 20.1                        | 20.1        | 20.4    | 20.4    | 21.1    | 21.1    | 21.4    | 22.1    | 22.4    | 22.7    | 22.7     | 23.4     | 23.4     | 23.4     | 23.7     | 23.7     |
| GE 7000               | 20.1                        | 20.1        | 20.4    | 20.4    | 21.1    | 21.1    | 21.4    | 22.1    | 22.4    | 22.7    | 22.7     | 23.4     | 23.4     | 23.4     | 23.7     | 23.7     |
| GE 6000               | 20.1                        | 20.1        | 20.4    | 20.4    | 21.1    | 21.1    | 21.4    | 22.1    | 22.4    | 22.7    | 22.7     | 23.4     | 23.4     | 23.4     | 23.7     | 23.7     |
| GE 5000               | 20.1                        | 20.1        | 20.4    | 20.4    | 21.1    | 21.1    | 21.4    | 22.1    | 22.4    | 22.7    | 22.7     | 23.4     | 23.4     | 23.4     | 23.7     | 23.7     |
| GE 4000               | 20.1                        | 20.1        | 20.4    | 20.4    | 21.1    | 21.1    | 21.4    | 22.1    | 22.4    | 22.7    | 22.7     | 23.4     | 23.4     | 23.4     | 23.7     | 23.7     |
| GE 3000               | 20.1                        | 20.1        | 20.4    | 20.4    | 21.1    | 21.1    | 21.4    | 22.1    | 22.4    | 22.7    | 22.7     | 23.4     | 23.4     | 23.4     | 23.7     | 23.7     |
| GE 2000               | 20.1                        | 20.1        | 20.4    | 20.4    | 21.1    | 21.1    | 21.4    | 22.1    | 22.4    | 22.7    | 22.7     | 23.4     | 23.4     | 23.4     | 23.7     | 23.7     |
| GE 1000               | 20.1                        | 20.1        | 20.4    | 20.4    | 21.1    | 21.1    | 21.4    | 22.1    | 22.4    | 22.7    | 22.7     | 23.4     | 23.4     | 23.4     | 23.7     | 23.7     |
| GE 500                | 20.1                        | 20.1        | 20.4    | 20.4    | 21.1    | 21.1    | 21.4    | 22.1    | 22.4    | 22.7    | 22.7     | 23.4     | 23.4     | 23.4     | 23.7     | 23.7     |
| GE 200                | 20.1                        | 20.1        | 20.4    | 20.4    | 21.1    | 21.1    | 21.4    | 22.1    | 22.4    | 22.7    | 22.7     | 23.4     | 23.4     | 23.4     | 23.7     | 23.7     |
| GE 100                | 20.1                        | 20.1        | 20.4    | 20.4    | 21.1    | 21.1    | 21.4    | 22.1    | 22.4    | 22.7    | 22.7     | 23.4     | 23.4     | 23.4     | 23.7     | 23.7     |
| GE 50                 | 20.1                        | 20.1        | 20.4    | 20.4    | 21.1    | 21.1    | 21.4    | 22.1    | 22.4    | 22.7    | 22.7     | 23.4     | 23.4     | 23.4     | 23.7     | 23.7     |
| GE 20                 | 20.1                        | 20.1        | 20.4    | 20.4    | 21.1    | 21.1    | 21.4    | 22.1    | 22.4    | 22.7    | 22.7     | 23.4     | 23.4     | 23.4     | 23.7     | 23.7     |
| GE 10                 | 20.1                        | 20.1        | 20.4    | 20.4    | 21.1    | 21.1    | 21.4    | 22.1    | 22.4    | 22.7    | 22.7     | 23.4     | 23.4     | 23.4     | 23.7     | 23.7     |
| GE 5                  | 20.1                        | 20.1        | 20.4    | 20.4    | 21.1    | 21.1    | 21.4    | 22.1    | 22.4    | 22.7    | 22.7     | 23.4     | 23.4     | 23.4     | 23.7     | 23.7     |
| GE 2                  | 20.1                        | 20.1        | 20.4    | 20.4    | 21.1    | 21.1    | 21.4    | 22.1    | 22.4    | 22.7    | 22.7     | 23.4     | 23.4     | 23.4     | 23.7     | 23.7     |
| GE 1                  | 20.1                        | 20.1        | 20.4    | 20.4    | 21.1    | 21.1    | 21.4    | 22.1    | 22.4    | 22.7    | 22.7     | 23.4     | 23.4     | 23.4     | 23.7     | 23.7     |
| GE 0                  | 20.1                        | 20.1        | 20.4    | 20.4    | 21.1    | 21.1    | 21.4    | 22.1    | 22.4    | 22.7    | 22.7     | 23.4     | 23.4     | 23.4     | 23.7     | 23.7     |

TOTAL NUMBER OF OBSERVATIONS: 279

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/HAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275950 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: JAN HOURS (LST): 0600-0800

| CEILING<br>IN<br>FEET | VISIBILITY IN STATUTE MILES |      |      |      |       |      |       |      |      |      |      |      |      |      |      |      |      |
|-----------------------|-----------------------------|------|------|------|-------|------|-------|------|------|------|------|------|------|------|------|------|------|
|                       | 1                           | GE   | GE   | GE   | GE    | GE   | GE    | GE   | GE   | GE   | GE   | GE   | GE   | GE   | GE   | GE   | GE   |
|                       | 1                           | 1/2  | 3/4  | 1    | 1 1/2 | 2    | 2 1/2 | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   |
| NO CEIL               | 1                           |      | 16.4 | 16.4 | 16.4  | 17.1 | 18.1  | 18.1 | 19.1 | 19.1 | 19.8 | 20.5 | 21.2 | 21.2 | 21.2 | 21.5 | 21.8 |
| GE 20000              |                             | 17.4 | 17.4 | 17.4 | 18.1  | 19.1 | 19.1  | 19.1 | 20.1 | 20.4 | 21.5 | 22.2 | 22.2 | 22.2 | 22.5 | 22.5 | 22.9 |
| GE 18000              |                             | 17.4 | 17.4 | 17.4 | 18.1  | 19.1 | 19.1  | 19.1 | 20.1 | 20.8 | 21.5 | 22.2 | 22.2 | 22.2 | 22.5 | 22.5 | 22.9 |
| GE 16000              |                             | 17.4 | 17.4 | 17.4 | 18.1  | 19.1 | 19.1  | 19.1 | 20.1 | 20.8 | 21.5 | 22.2 | 22.2 | 22.2 | 22.5 | 22.5 | 22.9 |
| GE 14000              |                             | 17.4 | 17.4 | 17.4 | 18.1  | 19.1 | 19.1  | 19.1 | 20.1 | 20.8 | 21.5 | 22.2 | 22.2 | 22.2 | 22.5 | 22.5 | 22.9 |
| GE 12000              |                             | 17.4 | 17.4 | 17.4 | 18.1  | 19.1 | 19.1  | 19.1 | 20.1 | 20.8 | 21.5 | 22.2 | 22.2 | 22.2 | 22.5 | 22.5 | 22.9 |
| GE 10000              |                             | 25.9 | 25.9 | 25.9 | 28.3  | 30.0 | 30.4  | 32.1 | 33.8 | 35.2 | 36.9 | 36.9 | 36.9 | 36.9 | 37.5 | 37.5 | 37.9 |
| GE 9000               |                             | 25.9 | 25.9 | 25.9 | 28.3  | 30.0 | 30.4  | 32.1 | 33.8 | 35.2 | 36.9 | 36.9 | 36.9 | 36.9 | 37.5 | 37.5 | 37.9 |
| GE 8000               |                             | 25.9 | 25.9 | 25.9 | 28.3  | 30.0 | 30.4  | 32.1 | 33.8 | 35.2 | 36.9 | 36.9 | 36.9 | 36.9 | 37.5 | 37.5 | 37.9 |
| GE 7000               |                             | 25.9 | 25.9 | 25.9 | 28.3  | 30.0 | 30.4  | 32.1 | 33.8 | 35.2 | 36.9 | 36.9 | 36.9 | 36.9 | 37.5 | 37.5 | 37.9 |
| GE 6000               |                             | 25.9 | 25.9 | 25.9 | 28.3  | 30.0 | 30.4  | 32.1 | 33.8 | 35.2 | 36.9 | 36.9 | 36.9 | 36.9 | 37.5 | 37.5 | 37.9 |
| GE 5000               |                             | 25.9 | 25.9 | 25.9 | 28.3  | 30.0 | 30.4  | 32.1 | 33.8 | 35.2 | 36.9 | 36.9 | 36.9 | 36.9 | 37.5 | 37.5 | 37.9 |
| GE 4500               |                             | 25.9 | 25.9 | 25.9 | 28.3  | 30.0 | 30.4  | 32.1 | 33.8 | 35.2 | 36.9 | 36.9 | 36.9 | 36.9 | 37.5 | 37.5 | 37.9 |
| GE 4000               |                             | 26.6 | 26.6 | 26.6 | 29.0  | 30.7 | 31.1  | 32.8 | 34.5 | 35.8 | 37.5 | 37.5 | 37.5 | 37.5 | 38.2 | 38.2 | 38.6 |
| GE 3500               |                             | 27.3 | 27.3 | 27.3 | 29.7  | 31.4 | 31.7  | 33.4 | 35.2 | 36.5 | 38.2 | 38.2 | 38.2 | 38.2 | 38.9 | 38.9 | 39.2 |
| GE 3000               |                             | 27.3 | 27.3 | 27.3 | 29.7  | 31.4 | 31.7  | 33.4 | 35.2 | 36.5 | 38.2 | 38.2 | 38.2 | 38.2 | 38.9 | 38.9 | 39.2 |
| GE 2500               |                             | 30.4 | 30.4 | 30.4 | 32.4  | 34.8 | 35.2  | 37.2 | 38.9 | 40.3 | 42.7 | 42.7 | 42.7 | 42.7 | 42.7 | 42.7 | 43.0 |
| GE 2000               |                             | 30.4 | 30.4 | 30.4 | 32.4  | 34.8 | 35.2  | 37.2 | 38.9 | 40.3 | 42.7 | 42.7 | 42.7 | 42.7 | 42.7 | 42.7 | 43.0 |
| GE 1800               |                             | 31.7 | 31.7 | 31.7 | 34.1  | 36.5 | 36.9  | 38.9 | 41.2 | 43.3 | 45.1 | 45.1 | 45.1 | 45.1 | 45.7 | 45.7 | 46.1 |
| GE 1600               |                             | 34.5 | 34.5 | 34.5 | 36.9  | 39.9 | 40.3  | 42.3 | 44.7 | 46.8 | 48.5 | 48.5 | 48.5 | 48.5 | 49.1 | 49.1 | 49.5 |
| GE 1400               |                             | 41.6 | 41.6 | 41.6 | 45.4  | 49.5 | 50.2  | 52.2 | 54.6 | 57.0 | 59.7 | 59.7 | 59.7 | 59.7 | 59.4 | 59.4 | 59.7 |
| GE 1200               |                             | 45.4 | 45.4 | 45.4 | 50.2  | 54.9 | 56.0  | 58.7 | 61.3 | 64.2 | 66.9 | 66.9 | 66.9 | 66.9 | 66.6 | 66.6 | 66.9 |
| GE 1000               |                             | 47.1 | 47.1 | 47.1 | 52.6  | 57.3 | 58.4  | 61.1 | 64.2 | 66.6 | 69.7 | 69.7 | 69.7 | 69.7 | 69.3 | 69.3 | 69.6 |
| GE 900                |                             | 47.1 | 47.1 | 47.1 | 52.6  | 57.3 | 58.4  | 61.1 | 64.2 | 66.6 | 69.7 | 69.7 | 69.7 | 69.7 | 69.3 | 69.3 | 69.6 |
| GE 800                |                             | 48.1 | 48.1 | 48.1 | 53.9  | 59.4 | 60.4  | 63.5 | 67.2 | 70.2 | 71.7 | 71.7 | 71.7 | 71.7 | 71.4 | 71.4 | 71.7 |
| GE 700                |                             | 52.2 | 52.2 | 52.2 | 60.1  | 66.2 | 67.2  | 71.7 | 77.1 | 80.2 | 81.9 | 81.9 | 81.9 | 81.9 | 82.6 | 82.6 | 83.6 |
| GE 600                |                             | 52.9 | 52.9 | 52.9 | 61.1  | 67.2 | 68.3  | 73.0 | 79.2 | 82.7 | 84.6 | 84.6 | 84.6 | 84.6 | 85.3 | 85.3 | 86.3 |
| GE 500                |                             | 53.6 | 53.6 | 53.6 | 62.1  | 68.3 | 69.3  | 74.7 | 82.3 | 86.3 | 87.7 | 87.7 | 87.7 | 87.7 | 88.4 | 88.4 | 89.8 |
| GE 400                |                             | 53.9 | 53.9 | 53.9 | 62.5  | 68.6 | 69.6  | 75.8 | 84.1 | 89.1 | 91.5 | 91.5 | 91.5 | 91.5 | 92.8 | 92.8 | 94.5 |
| GE 300                |                             | 53.9 | 53.9 | 53.9 | 62.5  | 68.6 | 69.6  | 75.8 | 84.1 | 89.1 | 91.5 | 91.5 | 91.5 | 91.5 | 92.8 | 92.8 | 94.5 |
| GE 200                |                             | 53.9 | 53.9 | 53.9 | 62.5  | 68.6 | 69.6  | 75.8 | 84.1 | 89.1 | 91.5 | 91.5 | 91.5 | 91.5 | 92.8 | 92.8 | 94.5 |
| GE 100                |                             | 53.9 | 53.9 | 53.9 | 62.5  | 68.6 | 69.6  | 75.8 | 84.1 | 89.1 | 91.5 | 91.5 | 91.5 | 91.5 | 92.8 | 92.8 | 94.5 |
| GE 0                  |                             | 53.9 | 53.9 | 53.9 | 62.5  | 68.6 | 69.6  | 75.8 | 84.1 | 89.1 | 91.5 | 91.5 | 91.5 | 91.5 | 92.8 | 92.8 | 94.5 |

TOTAL NUMBER OF OBSERVATIONS: 293

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 27505 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: JAN HOURS(IST): 0900-1100

| CEILING<br>IN<br>FEET | VISIBILITY IN STATUTE MILES |             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |
|-----------------------|-----------------------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|----------|----------|----------|----------|----------|----------|
|                       | GE<br>1                     | GE<br>1 1/2 | GE<br>2 | GE<br>3 | GE<br>4 | GE<br>5 | GE<br>6 | GE<br>7 | GE<br>8 | GE<br>9 | GE<br>10 | GE<br>11 | GE<br>12 | GE<br>13 | GE<br>14 | GE<br>15 |
| NO CEIL               |                             |             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |
| GE 2000               |                             |             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |
| GE 1500               |                             |             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |
| GE 1000               |                             |             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |
| GE 800                |                             |             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |
| GE 600                |                             |             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |
| GE 400                |                             |             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |
| GE 300                |                             |             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |
| GE 200                |                             |             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |
| GE 150                |                             |             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |
| GE 100                |                             |             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |
| GE 50                 |                             |             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |
| GE 0                  |                             |             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |

TOTAL NUMBER OF OBSERVATIONS: 277

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VEHICLES VISIBILITY  
FROM FOURLY OBSERVATIONS

PERIOD OF RECORD: 76-87  
MONTH: JAN. HOURS (LST): 1200-1400

[illegible]

TOTAL NUMBER OF OBSERVATIONS: 273

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/HAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 27593 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: JAN HOURS (LST): 1500-1700

| CEILING<br>IN<br>FEET | VISIBILITY IN STATUTE MILES |      |      |      |      |      |      |      |      |       |       |       |       |       |       |       |
|-----------------------|-----------------------------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|
|                       | 1                           | GE 1 | GE 3 | GE 4 | GE 5 | GE 6 | GE 7 | GE 8 | GE 9 | GE 10 | GE 11 | GE 12 | GE 13 | GE 14 | GE 15 | GE 16 |
| NO CEIL               | 1                           | .7   | 22.2 | 22.9 | 22.9 | 27.9 | 25.9 | 25.9 | 26.3 | 27.6  | 27.9  | 27.9  | 27.9  | 28.3  | 28.3  | 28.3  |
| GE 1000               | .7                          | 24.9 | 25.6 | 25.6 | 26.9 | 30.3 | 30.3 | 30.6 | 32.0 | 32.3  | 32.3  | 32.3  | 32.7  | 32.7  | 32.7  | 32.7  |
| GE 1600               | .7                          | 24.9 | 25.6 | 25.6 | 26.9 | 30.3 | 30.3 | 30.6 | 32.0 | 32.3  | 32.3  | 32.3  | 32.7  | 32.7  | 32.7  | 32.7  |
| GE 1400               | .7                          | 24.9 | 25.6 | 25.6 | 26.9 | 30.3 | 30.3 | 30.6 | 32.0 | 32.3  | 32.3  | 32.3  | 32.7  | 32.7  | 32.7  | 32.7  |
| GE 1200               | .7                          | 24.9 | 25.6 | 25.6 | 26.9 | 30.3 | 30.3 | 30.6 | 32.0 | 32.3  | 32.3  | 32.3  | 32.7  | 32.7  | 32.7  | 32.7  |
| GE 1000               | .7                          | 27.4 | 38.0 | 38.0 | 41.4 | 47.8 | 47.8 | 49.2 | 51.9 | 53.2  | 53.2  | 53.5  | 54.2  | 54.2  | 54.2  | 54.5  |
| GE 900                | .7                          | 37.4 | 38.0 | 38.0 | 41.4 | 47.8 | 47.8 | 49.2 | 51.9 | 53.2  | 53.2  | 53.5  | 54.2  | 54.2  | 54.2  | 54.5  |
| GE 800                | .7                          | 37.4 | 38.0 | 38.0 | 41.4 | 47.8 | 47.8 | 49.2 | 51.9 | 53.2  | 53.2  | 53.5  | 54.2  | 54.2  | 54.2  | 54.5  |
| GE 700                | .7                          | 37.4 | 38.0 | 38.0 | 41.4 | 47.8 | 47.8 | 49.2 | 51.9 | 53.2  | 53.2  | 53.5  | 54.2  | 54.2  | 54.2  | 54.5  |
| GE 600                | .7                          | 37.4 | 38.0 | 38.0 | 41.4 | 47.8 | 47.8 | 49.2 | 51.9 | 53.2  | 53.2  | 53.5  | 54.2  | 54.2  | 54.2  | 54.5  |
| GE 500                | .7                          | 37.4 | 38.0 | 38.0 | 41.4 | 47.8 | 47.8 | 49.2 | 51.9 | 53.2  | 53.2  | 53.5  | 54.2  | 54.2  | 54.2  | 54.5  |
| GE 450                | .7                          | 37.7 | 38.4 | 38.4 | 41.8 | 48.1 | 48.1 | 49.5 | 52.2 | 53.5  | 53.5  | 53.9  | 54.5  | 54.5  | 54.5  | 54.9  |
| GE 400                | .7                          | 37.7 | 38.4 | 38.4 | 41.8 | 48.1 | 48.1 | 49.5 | 52.2 | 53.5  | 53.5  | 53.9  | 54.5  | 54.5  | 54.5  | 54.9  |
| GE 350                | .7                          | 38.7 | 38.7 | 38.7 | 42.4 | 48.8 | 48.8 | 50.2 | 52.9 | 54.2  | 54.2  | 54.5  | 55.2  | 55.2  | 55.2  | 55.6  |
| GE 300                | .7                          | 38.7 | 40.1 | 40.1 | 43.8 | 50.8 | 50.8 | 52.2 | 54.9 | 56.2  | 56.2  | 56.6  | 57.2  | 57.2  | 57.2  | 57.6  |
| GE 250                | .7                          | 40.7 | 40.4 | 40.4 | 45.1 | 53.5 | 53.5 | 54.9 | 57.6 | 58.9  | 58.9  | 59.3  | 59.9  | 60.3  | 60.3  | 60.6  |
| GE 200                | .7                          | 41.4 | 43.1 | 43.1 | 46.8 | 54.5 | 54.5 | 55.9 | 58.6 | 59.9  | 59.9  | 60.3  | 60.9  | 61.3  | 61.3  | 61.6  |
| GE 150                | .7                          | 40.1 | 45.1 | 45.1 | 49.2 | 57.2 | 57.2 | 59.3 | 62.0 | 63.3  | 63.3  | 63.6  | 64.3  | 64.6  | 64.6  | 65.0  |
| GE 100                | .7                          | 40.6 | 48.8 | 48.8 | 53.2 | 61.6 | 61.6 | 64.0 | 67.3 | 68.7  | 68.7  | 69.3  | 69.7  | 70.0  | 70.0  | 70.4  |
| GE 90                 | .7                          | 49.2 | 51.6 | 51.6 | 55.9 | 65.3 | 65.3 | 67.7 | 71.4 | 73.1  | 73.1  | 73.7  | 74.4  | 74.7  | 74.7  | 75.1  |
| GE 80                 | .7                          | 49.5 | 51.6 | 51.6 | 56.2 | 65.7 | 65.7 | 68.4 | 72.7 | 74.4  | 74.4  | 75.1  | 75.1  | 75.4  | 75.4  | 75.8  |
| GE 70                 | .7                          | 51.6 | 53.5 | 53.5 | 58.2 | 68.7 | 68.7 | 71.7 | 76.4 | 78.1  | 78.1  | 78.8  | 79.8  | 80.1  | 80.1  | 80.5  |
| GE 60                 | .7                          | 52.2 | 54.2 | 54.2 | 58.9 | 69.4 | 69.4 | 72.4 | 77.8 | 79.8  | 79.8  | 80.5  | 81.5  | 81.8  | 81.8  | 82.2  |
| GE 50                 | .7                          | 52.2 | 54.2 | 54.2 | 57.3 | 70.4 | 70.4 | 74.7 | 82.2 | 84.5  | 84.5  | 85.5  | 86.9  | 87.2  | 87.2  | 87.5  |
| GE 40                 | .7                          | 52.2 | 54.2 | 54.2 | 59.3 | 70.4 | 70.4 | 75.4 | 83.8 | 86.2  | 86.2  | 87.5  | 88.9  | 89.6  | 89.6  | 89.9  |
| GE 30                 | .7                          | 52.9 | 54.9 | 54.9 | 59.9 | 71.6 | 71.6 | 76.8 | 85.5 | 87.9  | 87.9  | 89.6  | 92.3  | 92.9  | 92.9  | 93.3  |
| GE 20                 | .7                          | 52.9 | 54.9 | 54.9 | 59.9 | 71.7 | 71.7 | 77.8 | 87.5 | 89.9  | 89.9  | 91.6  | 94.3  | 95.6  | 95.6  | 96.3  |
| GE 10                 | .7                          | 52.9 | 54.9 | 54.9 | 59.9 | 71.7 | 71.7 | 78.1 | 87.9 | 90.9  | 90.9  | 92.6  | 95.9  | 98.0  | 98.0  | 98.7  |
| GE 0                  | .7                          | 52.9 | 54.9 | 54.9 | 59.9 | 71.7 | 71.7 | 78.1 | 87.9 | 90.9  | 90.9  | 92.6  | 95.9  | 98.3  | 98.3  | 99.0  |
| GE 0                  | .7                          | 52.9 | 54.9 | 54.9 | 59.9 | 71.7 | 71.7 | 78.1 | 87.9 | 90.9  | 90.9  | 92.6  | 95.9  | 98.3  | 98.3  | 100.0 |

TOTAL NUMBER OF OBSERVATIONS: 227

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

PERIOD OF RECORD: 78-87  
MONTH: JAN HOURS (LST): 1900-2000

| CEILING<br>IN<br>FEET | VISIBILITY IN STATUTE MILES |         |         |         |         |             |         |             |             |         |           |           |           |            |           |         |
|-----------------------|-----------------------------|---------|---------|---------|---------|-------------|---------|-------------|-------------|---------|-----------|-----------|-----------|------------|-----------|---------|
|                       | GE<br>1                     | GE<br>2 | GE<br>3 | GE<br>4 | GE<br>5 | GF<br>2 1/2 | GE<br>2 | GE<br>1 1/2 | GE<br>1 1/4 | GE<br>1 | GE<br>3/4 | GF<br>5/8 | GE<br>1/2 | GE<br>5/16 | GE<br>1/4 | GE<br>0 |
|                       | NO                          | CEIL    | 1       | 2       | 3       | 4           | 5       | 6           | 7           | 8       | 9         | 10        | 11        | 12         | 13        | 14      |
| NO                    | CEIL                        | 1       | 2       | 3       | 4       | 5           | 6       | 7           | 8           | 9       | 10        | 11        | 12        | 13         | 14        | 15      |
| GE                    | 10000                       | 24.4    | 24.4    | 24.4    | 25.6    | 26.6        | 27.1    | 28.6        | 31.8        | 32.1    | 32.4      | 32.6      | 32.9      | 32.8       | 32.8      | 32.8    |
| GE                    | 18000                       | 24.4    | 24.4    | 24.4    | 25.6    | 26.6        | 27.1    | 28.6        | 31.8        | 32.1    | 32.4      | 32.6      | 32.9      | 32.8       | 32.8      | 32.8    |
| GE                    | 16000                       | 24.4    | 24.4    | 24.4    | 25.6    | 26.6        | 27.1    | 28.6        | 31.8        | 32.1    | 32.4      | 32.6      | 32.8      | 32.8       | 32.8      | 32.8    |
| GE                    | 14000                       | 24.4    | 24.4    | 24.4    | 25.6    | 26.6        | 27.1    | 28.6        | 31.8        | 32.1    | 32.4      | 32.6      | 32.9      | 32.8       | 32.8      | 32.8    |
| GE                    | 12000                       | 24.4    | 24.4    | 24.4    | 25.6    | 26.6        | 27.1    | 28.6        | 31.8        | 32.1    | 32.4      | 32.6      | 32.9      | 32.8       | 32.8      | 32.8    |
| GE                    | 10000                       | 24.4    | 24.4    | 24.4    | 25.6    | 26.6        | 27.1    | 28.6        | 31.8        | 32.1    | 32.4      | 32.6      | 32.9      | 32.8       | 32.8      | 32.8    |
| GE                    | 9000                        | 35.6    | 35.6    | 35.6    | 38.6    | 40.5        | 40.8    | 43.5        | 47.5        | 48.2    | 48.2      | 49.5      | 49.9      | 50.2       | 50.2      | 50.2    |
| GE                    | 8000                        | 35.6    | 35.6    | 35.6    | 38.6    | 40.5        | 40.8    | 43.5        | 47.5        | 48.2    | 48.2      | 49.5      | 49.9      | 50.2       | 50.2      | 50.2    |
| GE                    | 7000                        | 35.6    | 35.6    | 35.6    | 38.6    | 40.5        | 40.8    | 43.5        | 47.5        | 48.2    | 48.2      | 49.5      | 49.9      | 50.2       | 50.2      | 50.2    |
| GE                    | 6000                        | 35.6    | 35.6    | 35.6    | 38.6    | 40.5        | 40.8    | 43.5        | 47.5        | 48.2    | 48.2      | 49.5      | 49.9      | 50.2       | 50.2      | 50.2    |
| GE                    | 5000                        | 36.1    | 36.1    | 36.1    | 39.1    | 40.5        | 41.1    | 43.8        | 47.8        | 48.5    | 48.5      | 49.8      | 50.2      | 50.5       | 50.5      | 50.5    |
| GE                    | 4000                        | 36.1    | 36.1    | 36.1    | 39.1    | 40.5        | 41.1    | 43.8        | 47.8        | 48.5    | 48.5      | 49.8      | 50.2      | 50.5       | 50.5      | 50.5    |
| GE                    | 3000                        | 37.6    | 37.6    | 37.6    | 40.8    | 42.8        | 42.8    | 45.5        | 49.5        | 50.2    | 51.2      | 51.5      | 51.8      | 52.2       | 52.2      | 52.2    |
| GE                    | 2000                        | 38.1    | 38.1    | 38.1    | 41.1    | 42.8        | 43.1    | 45.5        | 49.8        | 50.5    | 51.5      | 51.8      | 52.2      | 52.5       | 52.5      | 52.5    |
| GE                    | 1000                        | 38.4    | 38.4    | 38.4    | 41.4    | 43.5        | 44.1    | 46.8        | 50.8        | 51.5    | 52.5      | 52.8      | 53.2      | 53.5       | 53.5      | 53.5    |
| GE                    | 2500                        | 41.6    | 41.6    | 41.6    | 44.8    | 46.5        | 47.2    | 50.5        | 54.5        | 55.2    | 56.2      | 56.5      | 56.9      | 57.2       | 57.2      | 57.2    |
| GE                    | 2000                        | 44.9    | 44.9    | 44.9    | 48.2    | 49.8        | 50.5    | 54.2        | 58.2        | 59.9    | 59.9      | 60.2      | 60.5      | 61.2       | 61.2      | 61.2    |
| GE                    | 1500                        | 45.5    | 45.5    | 45.5    | 49.2    | 50.6        | 51.5    | 55.2        | 59.2        | 59.9    | 61.2      | 61.5      | 61.9      | 62.5       | 62.5      | 62.5    |
| GE                    | 1000                        | 46.5    | 46.5    | 46.5    | 50.8    | 52.5        | 53.5    | 56.2        | 60.2        | 60.2    | 60.2      | 60.6      | 60.9      | 61.6       | 61.6      | 61.6    |
| GE                    | 1000                        | 51.5    | 51.5    | 51.5    | 55.5    | 56.5        | 56.5    | 60.2        | 64.2        | 64.2    | 64.2      | 64.6      | 64.9      | 65.6       | 65.6      | 65.6    |
| GE                    | 1000                        | 52.5    | 52.5    | 52.5    | 56.9    | 58.2        | 58.2    | 61.9        | 65.9        | 65.9    | 65.9      | 66.3      | 66.6      | 67.6       | 67.6      | 67.6    |
| GE                    | 1000                        | 53.5    | 53.5    | 53.5    | 57.9    | 59.2        | 59.2    | 62.9        | 66.9        | 66.9    | 66.9      | 67.3      | 67.6      | 68.6       | 68.6      | 68.6    |
| GE                    | 1000                        | 54.5    | 54.5    | 54.5    | 58.9    | 60.2        | 60.2    | 63.9        | 67.9        | 67.9    | 67.9      | 68.3      | 68.6      | 69.6       | 69.6      | 69.6    |
| GE                    | 1000                        | 57.9    | 57.9    | 57.9    | 62.9    | 64.2        | 64.2    | 67.9        | 71.9        | 71.9    | 71.9      | 72.3      | 72.6      | 73.6       | 73.6      | 73.6    |
| GE                    | 1000                        | 57.9    | 57.9    | 57.9    | 62.9    | 64.2        | 64.2    | 67.9        | 71.9        | 71.9    | 71.9      | 72.3      | 72.6      | 73.6       | 73.6      | 73.6    |
| GE                    | 1000                        | 57.9    | 57.9    | 57.9    | 62.9    | 64.2        | 64.2    | 67.9        | 71.9        | 71.9    | 71.9      | 72.3      | 72.6      | 73.6       | 73.6      | 73.6    |
| GE                    | 1000                        | 57.9    | 57.9    | 57.9    | 62.9    | 64.2        | 64.2    | 67.9        | 71.9        | 71.9    | 71.9      | 72.3      | 72.6      | 73.6       | 73.6      | 73.6    |
| GE                    | 1000                        | 57.9    | 57.9    | 57.9    | 62.9    | 64.2        | 64.2    | 67.9        | 71.9        | 71.9    | 71.9      | 72.3      | 72.6      | 73.6       | 73.6      | 73.6    |
| GE                    | 1000                        | 57.9    | 57.9    | 57.9    | 62.9    | 64.2        | 64.2    | 67.9        | 71.9        | 71.9    | 71.9      | 72.3      | 72.6      | 73.6       | 73.6      | 73.6    |
| GE                    | 1000                        | 57.9    | 57.9    | 57.9    | 62.9    | 64.2        | 64.2    | 67.9        | 71.9        | 71.9    | 71.9      | 72.3      | 72.6      | 73.6       | 73.6      | 73.6    |
| GE                    | 1000                        | 57.9    | 57.9    | 57.9    | 62.9    | 64.2        | 64.2    | 67.9        | 71.9        | 71.9    | 71.9      | 72.3      | 72.6      | 73.6       | 73.6      | 73.6    |
| GE                    | 1000                        | 57.9    | 57.9    | 57.9    | 62.9    | 64.2        | 64.2    | 67.9        | 71.9        | 71.9    | 71.9      | 72.3      | 72.6      | 73.6       | 73.6      | 73.6    |
| GE                    | 1000                        | 57.9    | 57.9    | 57.9    | 62.9    | 64.2        | 64.2    | 67.9        | 71.9        | 71.9    | 71.9      | 72.3      | 72.6      | 73.6       | 73.6      | 73.6    |
| GE                    | 1000                        | 57.9    | 57.9    | 57.9    | 62.9    | 64.2        | 64.2    | 67.9        | 71.9        | 71.9    | 71.9      | 72.3      | 72.6      | 73.6       | 73.6      | 73.6    |
| GE                    | 1000                        | 57.9    | 57.9    | 57.9    | 62.9    | 64.2        | 64.2    | 67.9        | 71.9        | 71.9    | 71.9      | 72.3      | 72.6      | 73.6       | 73.6      | 73.6    |
| GE                    | 1000                        | 57.9    | 57.9    | 57.9    | 62.9    | 64.2        | 64.2    | 67.9        | 71.9        | 71.9    | 71.9      | 72.3      | 72.6      | 73.6       | 73.6      | 73.6    |
| GE                    | 1000                        | 57.9    | 57.9    | 57.9    | 62.9    | 64.2        | 64.2    | 67.9        | 71.9        | 71.9    | 71.9      | 72.3      | 72.6      | 73.6       | 73.6      | 73.6    |
| GE                    | 1000                        | 57.9    | 57.9    | 57.9    | 62.9    | 64.2        | 64.2    | 67.9        | 71.9        | 71.9    | 71.9      | 72.3      | 72.6      | 73.6       | 73.6      | 73.6    |
| GE                    | 1000                        | 57.9    | 57.9    | 57.9    | 62.9    | 64.2        | 64.2    | 67.9        | 71.9        | 71.9    | 71.9      | 72.3      | 72.6      | 73.6       | 73.6      | 73.6    |
| GE                    | 1000                        | 57.9    | 57.9    | 57.9    | 62.9    | 64.2        | 64.2    | 67.9        | 71.9        | 71.9    | 71.9      | 72.3      | 72.6      | 73.6       | 73.6      | 73.6    |
| GE                    | 1000                        | 57.9    | 57.9    | 57.9    | 62.9    | 64.2        | 64.2    | 67.9        | 71.9        | 71.9    | 71.9      | 72.3      | 72.6      | 73.6       | 73.6      | 73.6    |
| GE                    | 1000                        | 57.9    | 57.9    | 57.9    | 62.9    | 64.2        | 64.2    | 67.9        | 71.9        | 71.9    | 71.9      | 72.3      | 72.6      | 73.6       | 73.6      | 73.6    |
| GE                    | 1000                        | 57.9    | 57.9    | 57.9    | 62.9    | 64.2        | 64.2    | 67.9        | 71.9        | 71.9    | 71.9      | 72.3      | 72.6      | 73.6       | 73.6      | 73.6    |
| GE                    | 1000                        | 57.9    | 57.9    | 57.9    | 62.9    | 64.2        | 64.2    | 67.9        | 71.9        | 71.9    | 71.9      | 72.3      | 72.6      | 73.6       | 73.6      | 73.6    |
| GE                    | 1000                        | 57.9    | 57.9    | 57.9    | 62.9    | 64.2        | 64.2    | 67.9        | 71.9        | 71.9    | 71.9      | 72.3      | 72.6      | 73.6       | 73.6      | 73.6    |
| GE                    | 1000                        | 57.9    | 57.9    | 57.9    | 62.9    | 64.2        | 64.2    | 67.9        | 71.9        | 71.9    | 71.9      | 72.3      | 72.6      | 73.6       | 73.6      | 73.6    |
| GE                    | 1000                        | 57.9    | 57.9    | 57.9    | 62.9    | 64.2        | 64.2    | 67.9        | 71.9        | 71.9    | 71.9      | 72.3      | 72.6      | 73.6       | 73.6      | 73.6    |
| GE                    | 1000                        | 57.9    | 57.9    | 57.9    | 62.9    | 64.2        | 64.2    | 67.9        | 71.9        | 71.9    | 71.9      | 72.3      | 72.6      | 73.6       | 73.6      | 73.6    |
| GE                    | 1000                        | 57.9    | 57.9    | 57.9    | 62.9    | 64.2        | 64.2    | 67.9        | 71.9        | 71.9    | 71.9      | 72.3      | 72.6      | 73.6       | 73.6      | 73.6    |
| GE                    | 1000                        | 57.9    | 57.9    | 57.9    | 62.9    | 64.2        | 64.2    | 67.9        | 71.9        | 71.9    | 71.9      | 72.3      | 72.6      | 73.6       | 73.6      | 73.6    |
| GE                    | 1000                        | 57.9    | 57.9    | 57.9    | 62.9    | 64.2        | 64.2    | 67.9        | 71.9        |         |           |           |           |            |           |         |

TOTAL NUMBER OF OBSERVATIONS: 289

GLOBAL CLIMATOLOGY BRANCH  
USAF/CLAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275601 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: JAN HOURS(IST): 2100-2300

| CEILING<br>IN<br>FEET | VISIBILITY IN STATUTE MILES |     |     |   |       |   |       |   |   |   |   |   |   |   |    |    |
|-----------------------|-----------------------------|-----|-----|---|-------|---|-------|---|---|---|---|---|---|---|----|----|
|                       | 1                           | 1/2 | 3/4 | 1 | 1 1/2 | 2 | 2 1/2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 10 |
| NO CEIL               | 1                           | 1   | 1   | 1 | 1     | 1 | 1     | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  |
| GE 2000               | 1                           | 1   | 1   | 1 | 1     | 1 | 1     | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  |
| GE 1800               | 1                           | 1   | 1   | 1 | 1     | 1 | 1     | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  |
| GE 1600               | 1                           | 1   | 1   | 1 | 1     | 1 | 1     | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  |
| GE 1400               | 1                           | 1   | 1   | 1 | 1     | 1 | 1     | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  |
| GE 1200               | 1                           | 1   | 1   | 1 | 1     | 1 | 1     | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  |
| GE 1000               | 1                           | 1   | 1   | 1 | 1     | 1 | 1     | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  |
| GE 900                | 1                           | 1   | 1   | 1 | 1     | 1 | 1     | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  |
| GE 800                | 1                           | 1   | 1   | 1 | 1     | 1 | 1     | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  |
| GE 700                | 1                           | 1   | 1   | 1 | 1     | 1 | 1     | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  |
| GE 600                | 1                           | 1   | 1   | 1 | 1     | 1 | 1     | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  |
| GE 500                | 1                           | 1   | 1   | 1 | 1     | 1 | 1     | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  |
| GE 400                | 1                           | 1   | 1   | 1 | 1     | 1 | 1     | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  |
| GE 300                | 1                           | 1   | 1   | 1 | 1     | 1 | 1     | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  |
| GE 200                | 1                           | 1   | 1   | 1 | 1     | 1 | 1     | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  |
| GE 100                | 1                           | 1   | 1   | 1 | 1     | 1 | 1     | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  |
| GE 0                  | 1                           | 1   | 1   | 1 | 1     | 1 | 1     | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  |

TOTAL NUMBER OF OBSERVATIONS: 300

GLOBAL CLIMATOLOGY BRANCH  
USAF/ETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM FOURLY OBSERVATIONS

STATION NUMBER: 27595 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: JAN HOURS (LAST): ALL

| CEILING<br>IN<br>FEET | GE<br>1 | GE<br>2 | GE<br>3 | GE<br>4 | GE<br>5 | GE<br>6 | GE<br>7 | GE<br>8 | GE<br>9 | GE<br>10 | GE<br>11 | GE<br>12 | GE<br>13 | GE<br>14 | GE<br>15 | GE<br>16 | GE<br>17 | GE<br>18 | GE<br>19 | GE<br>20 |
|-----------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
|                       |         |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |          |          |          |          |
| NO CEIL               | 1       | 2       | 3       | 4       | 5       | 6       | 7       | 8       | 9       | 10       | 11       | 12       | 13       | 14       | 15       | 16       | 17       | 18       | 19       | 20       |
| GE 20000              | 1       | 2       | 3       | 4       | 5       | 6       | 7       | 8       | 9       | 10       | 11       | 12       | 13       | 14       | 15       | 16       | 17       | 18       | 19       | 20       |
| GE 18000              | 1       | 2       | 3       | 4       | 5       | 6       | 7       | 8       | 9       | 10       | 11       | 12       | 13       | 14       | 15       | 16       | 17       | 18       | 19       | 20       |
| GE 16000              | 1       | 2       | 3       | 4       | 5       | 6       | 7       | 8       | 9       | 10       | 11       | 12       | 13       | 14       | 15       | 16       | 17       | 18       | 19       | 20       |
| GE 14000              | 1       | 2       | 3       | 4       | 5       | 6       | 7       | 8       | 9       | 10       | 11       | 12       | 13       | 14       | 15       | 16       | 17       | 18       | 19       | 20       |
| GE 12000              | 1       | 2       | 3       | 4       | 5       | 6       | 7       | 8       | 9       | 10       | 11       | 12       | 13       | 14       | 15       | 16       | 17       | 18       | 19       | 20       |
| GE 10000              | 1       | 2       | 3       | 4       | 5       | 6       | 7       | 8       | 9       | 10       | 11       | 12       | 13       | 14       | 15       | 16       | 17       | 18       | 19       | 20       |
| GE 9000               | 1       | 2       | 3       | 4       | 5       | 6       | 7       | 8       | 9       | 10       | 11       | 12       | 13       | 14       | 15       | 16       | 17       | 18       | 19       | 20       |
| GE 8000               | 1       | 2       | 3       | 4       | 5       | 6       | 7       | 8       | 9       | 10       | 11       | 12       | 13       | 14       | 15       | 16       | 17       | 18       | 19       | 20       |
| GE 7000               | 1       | 2       | 3       | 4       | 5       | 6       | 7       | 8       | 9       | 10       | 11       | 12       | 13       | 14       | 15       | 16       | 17       | 18       | 19       | 20       |
| GE 6000               | 1       | 2       | 3       | 4       | 5       | 6       | 7       | 8       | 9       | 10       | 11       | 12       | 13       | 14       | 15       | 16       | 17       | 18       | 19       | 20       |
| GE 5000               | 1       | 2       | 3       | 4       | 5       | 6       | 7       | 8       | 9       | 10       | 11       | 12       | 13       | 14       | 15       | 16       | 17       | 18       | 19       | 20       |
| GE 4000               | 1       | 2       | 3       | 4       | 5       | 6       | 7       | 8       | 9       | 10       | 11       | 12       | 13       | 14       | 15       | 16       | 17       | 18       | 19       | 20       |
| GE 3000               | 1       | 2       | 3       | 4       | 5       | 6       | 7       | 8       | 9       | 10       | 11       | 12       | 13       | 14       | 15       | 16       | 17       | 18       | 19       | 20       |
| GE 2000               | 1       | 2       | 3       | 4       | 5       | 6       | 7       | 8       | 9       | 10       | 11       | 12       | 13       | 14       | 15       | 16       | 17       | 18       | 19       | 20       |
| GE 1000               | 1       | 2       | 3       | 4       | 5       | 6       | 7       | 8       | 9       | 10       | 11       | 12       | 13       | 14       | 15       | 16       | 17       | 18       | 19       | 20       |
| GE 500                | 1       | 2       | 3       | 4       | 5       | 6       | 7       | 8       | 9       | 10       | 11       | 12       | 13       | 14       | 15       | 16       | 17       | 18       | 19       | 20       |
| GE 0                  | 1       | 2       | 3       | 4       | 5       | 6       | 7       | 8       | 9       | 10       | 11       | 12       | 13       | 14       | 15       | 16       | 17       | 18       | 19       | 20       |

TOTAL NUMBER OF OBSERVATIONS: 2347

GLOBAL CLIMATOLOGY BRANCH  
USAF/ETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275557 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 75-87  
MONTH: FEB HOURS (LST): 0000-0200

| CEILING<br>IN<br>FEET | VISIBILITY IN STATUTE MILES |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |
|-----------------------|-----------------------------|---------|---------|---------|---------|---------|---------|---------|---------|----------|----------|----------|----------|----------|----------|----------|
|                       | GE<br>1                     | GE<br>2 | GE<br>3 | GE<br>4 | GE<br>5 | GE<br>6 | GE<br>7 | GE<br>8 | GE<br>9 | GE<br>10 | GE<br>11 | GE<br>12 | GE<br>13 | GE<br>14 | GE<br>15 | GE<br>16 |
| NO CEIL               | 26.9                        | 26.9    | 26.9    | 27.5    | 31.4    | 31.4    | 32.6    | 34.3    | 37.6    | 39.9     | 39.9     | 39.9     | 39.9     | 39.9     | 39.9     | 41.0     |
| GE 2000]              | 29.8                        | 29.8    | 29.8    | 31.7    | 33.6    | 33.6    | 35.1    | 36.5    | 39.9    | 40.7     | 41.0     | 41.7     | 42.1     | 42.1     | 43.2     | 43.2     |
| GE 1800]              | 29.8                        | 29.8    | 29.8    | 31.7    | 33.6    | 33.6    | 35.1    | 36.5    | 39.9    | 40.7     | 41.0     | 41.7     | 42.1     | 42.1     | 43.2     | 43.2     |
| GE 1600]              | 29.8                        | 29.8    | 29.8    | 31.7    | 33.6    | 33.6    | 35.1    | 36.5    | 39.9    | 40.7     | 41.0     | 41.7     | 42.1     | 42.1     | 43.2     | 43.2     |
| GE 1400]              | 29.8                        | 29.8    | 29.8    | 31.7    | 33.6    | 33.6    | 35.1    | 36.5    | 39.9    | 40.7     | 41.0     | 41.7     | 42.1     | 42.1     | 43.2     | 43.2     |
| GE 1200]              | 29.8                        | 29.8    | 29.8    | 31.7    | 33.6    | 33.6    | 35.1    | 36.5    | 39.9    | 40.7     | 41.0     | 41.7     | 42.1     | 42.1     | 43.2     | 43.2     |
| GE 1000]              | 39.1                        | 39.1    | 39.1    | 43.9    | 46.9    | 46.9    | 49.8    | 53.5    | 57.2    | 57.2     | 59.8     | 59.8     | 60.1     | 60.1     | 61.3     | 61.3     |
| GE 900]               | 39.1                        | 39.1    | 39.1    | 43.9    | 46.9    | 46.9    | 49.8    | 53.5    | 57.2    | 57.2     | 59.8     | 59.8     | 60.1     | 60.1     | 61.3     | 61.3     |
| GE 800]               | 39.1                        | 39.1    | 39.1    | 43.9    | 46.9    | 46.9    | 49.8    | 53.5    | 57.2    | 57.2     | 59.8     | 59.8     | 60.1     | 60.1     | 61.3     | 61.3     |
| GE 700]               | 39.1                        | 39.1    | 39.1    | 43.9    | 46.9    | 46.9    | 49.8    | 53.5    | 57.2    | 57.2     | 59.8     | 59.8     | 60.1     | 60.1     | 61.3     | 61.3     |
| GE 600]               | 39.1                        | 39.1    | 39.1    | 43.9    | 46.9    | 46.9    | 49.8    | 53.5    | 57.2    | 57.2     | 59.8     | 59.8     | 60.1     | 60.1     | 61.3     | 61.3     |
| GE 500]               | 39.5                        | 39.5    | 39.5    | 44.3    | 47.2    | 47.2    | 50.2    | 53.9    | 57.6    | 57.6     | 59.4     | 59.4     | 60.1     | 60.5     | 60.5     | 61.6     |
| GE 450]               | 40.2                        | 40.2    | 40.2    | 45.0    | 48.0    | 48.0    | 50.9    | 54.6    | 58.3    | 58.3     | 59.7     | 59.7     | 60.1     | 60.9     | 61.3     | 62.4     |
| GE 400]               | 40.2                        | 40.2    | 40.2    | 45.0    | 48.0    | 48.0    | 50.9    | 54.6    | 58.3    | 58.3     | 59.7     | 59.7     | 60.1     | 60.9     | 61.3     | 62.4     |
| GE 350]               | 40.6                        | 40.6    | 40.6    | 45.4    | 48.3    | 48.3    | 51.3    | 55.0    | 58.7    | 58.7     | 60.5     | 60.5     | 61.3     | 61.6     | 61.6     | 62.7     |
| GE 300]               | 41.7                        | 41.7    | 41.7    | 46.5    | 49.4    | 49.4    | 52.4    | 56.1    | 59.8    | 59.8     | 61.0     | 61.0     | 62.4     | 62.7     | 62.7     | 63.8     |
| GE 250]               | 42.4                        | 42.4    | 42.4    | 47.0    | 50.6    | 50.6    | 53.5    | 57.2    | 60.9    | 60.9     | 62.7     | 62.7     | 63.5     | 63.8     | 63.8     | 64.9     |
| GE 200]               | 44.3                        | 44.3    | 44.3    | 49.1    | 52.4    | 52.4    | 55.7    | 59.4    | 63.1    | 63.1     | 64.5     | 64.5     | 65.7     | 66.1     | 66.1     | 67.2     |
| GE 150]               | 45.4                        | 45.4    | 45.4    | 50.6    | 53.9    | 53.9    | 57.2    | 60.9    | 64.6    | 64.6     | 66.4     | 66.4     | 67.2     | 67.5     | 67.5     | 68.6     |
| GE 100]               | 46.0                        | 46.0    | 46.0    | 51.1    | 54.8    | 54.8    | 57.2    | 60.5    | 64.2    | 64.2     | 67.5     | 67.5     | 70.5     | 70.8     | 70.8     | 72.0     |
| GE 100]               | 51.3                        | 51.3    | 51.3    | 59.3    | 62.7    | 63.1    | 66.4    | 70.8    | 74.5    | 74.5     | 76.4     | 76.4     | 77.1     | 77.5     | 77.5     | 78.6     |
| GE 100]               | 53.9                        | 53.9    | 53.9    | 61.5    | 66.4    | 66.4    | 70.1    | 75.6    | 79.3    | 79.3     | 81.5     | 81.5     | 82.3     | 82.7     | 82.7     | 83.8     |
| GE 900]               | 54.2                        | 54.2    | 54.2    | 62.4    | 67.2    | 67.2    | 70.8    | 76.8    | 80.8    | 80.8     | 83.0     | 83.0     | 83.8     | 84.1     | 84.1     | 85.2     |
| GE 800]               | 55.1                        | 55.1    | 55.1    | 63.1    | 68.3    | 68.3    | 72.3    | 78.7    | 82.3    | 82.3     | 84.5     | 84.5     | 85.2     | 85.6     | 85.6     | 86.7     |
| GE 700]               | 55.4                        | 55.4    | 55.4    | 63.9    | 69.0    | 69.0    | 73.4    | 79.3    | 83.4    | 83.4     | 85.6     | 85.6     | 86.3     | 86.7     | 86.7     | 88.2     |
| GE 600]               | 55.4                        | 55.4    | 55.4    | 64.2    | 70.5    | 70.5    | 74.9    | 81.9    | 86.3    | 86.3     | 88.9     | 88.9     | 89.7     | 90.0     | 90.0     | 91.5     |
| GE 500]               | 55.4                        | 55.4    | 55.4    | 64.2    | 70.8    | 71.2    | 75.6    | 83.1    | 87.8    | 87.8     | 90.4     | 90.4     | 91.1     | 91.5     | 91.5     | 93.4     |
| GE 400]               | 55.7                        | 55.7    | 55.7    | 64.6    | 71.6    | 72.0    | 76.4    | 84.1    | 89.7    | 89.7     | 92.1     | 92.1     | 93.4     | 93.7     | 94.1     | 95.9     |
| GE 300]               | 55.7                        | 55.7    | 55.7    | 64.6    | 71.6    | 72.0    | 76.4    | 84.9    | 90.4    | 90.4     | 92.8     | 92.8     | 94.1     | 94.5     | 94.5     | 97.8     |
| GE 200]               | 55.7                        | 55.7    | 55.7    | 64.6    | 71.6    | 72.0    | 76.4    | 84.9    | 90.8    | 90.8     | 93.6     | 93.6     | 95.6     | 95.9     | 96.3     | 98.2     |
| GE 100]               | 55.7                        | 55.7    | 55.7    | 64.6    | 71.6    | 72.0    | 76.4    | 84.9    | 90.8    | 90.8     | 93.6     | 93.6     | 95.6     | 96.3     | 97.4     | 99.6     |
| GE 100]               | 55.7                        | 55.7    | 55.7    | 64.6    | 71.6    | 72.0    | 76.4    | 84.9    | 90.8    | 90.8     | 93.6     | 93.6     | 95.6     | 96.3     | 97.4     | 100.0    |

TOTAL NUMBER OF OBSERVATIONS: 271

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM FOURLY OBSERVATIONS

STATION NUMBER: 275757 STATION NAME: KAZAK, USSR

PERIOD OF RECORD: 78-87  
MONTH: FEB HOURS(LST): 0300-0500

| CEILING<br>IN<br>FEET | VISIBILITY IN STATUTE MILES |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |          |          |
|-----------------------|-----------------------------|---------|---------|---------|---------|---------|---------|---------|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
|                       | GE<br>1                     | GE<br>2 | GE<br>3 | GE<br>4 | GE<br>5 | GE<br>6 | GE<br>7 | GE<br>8 | GE<br>9 | GE<br>10 | GE<br>11 | GE<br>12 | GE<br>13 | GE<br>14 | GE<br>15 | GE<br>16 | GE<br>17 | GE<br>18 |
| NO CLIL               |                             | 22.2    | 27.2    | 22.2    | 25.4    | 27.2    | 27.2    | 28.6    | 32.2    | 34.8     | 35.9     | 35.9     | 36.2     | 36.6     | 37.0     | 39.1     |          |          |
| GE 1000               |                             | 25.0    | 25.0    | 25.0    | 27.9    | 29.7    | 29.7    | 31.2    | 34.8    | 37.3     | 39.0     | 39.0     | 38.4     | 38.8     | 39.1     | 39.5     | 41.7     |          |
| GE 1200               |                             | 25.0    | 25.0    | 25.0    | 27.9    | 29.7    | 29.7    | 31.2    | 34.8    | 37.3     | 39.0     | 39.0     | 38.4     | 38.8     | 39.1     | 39.5     | 41.7     |          |
| GE 1400               |                             | 25.0    | 25.0    | 25.0    | 27.9    | 29.7    | 29.7    | 31.2    | 34.8    | 37.3     | 39.0     | 39.0     | 38.4     | 38.8     | 39.1     | 39.5     | 41.7     |          |
| GE 1600               |                             | 25.0    | 25.0    | 25.0    | 27.9    | 29.7    | 29.7    | 31.2    | 34.8    | 37.3     | 39.0     | 39.0     | 38.4     | 38.8     | 39.1     | 39.5     | 41.7     |          |
| GE 1800               |                             | 31.2    | 38.4    | 38.4    | 42.4    | 46.0    | 46.0    | 48.6    | 53.6    | 56.2     | 56.2     | 56.2     | 57.2     | 57.6     | 58.0     | 58.3     | 60.5     |          |
| GE 2000               |                             | 31.2    | 38.4    | 38.4    | 42.4    | 46.0    | 46.0    | 48.6    | 53.6    | 56.2     | 56.2     | 56.2     | 57.2     | 57.6     | 58.0     | 58.3     | 60.5     |          |
| GE 2200               |                             | 31.2    | 38.4    | 38.4    | 42.4    | 46.0    | 46.0    | 48.6    | 53.6    | 56.2     | 56.2     | 56.2     | 57.2     | 57.6     | 58.0     | 58.3     | 60.5     |          |
| GE 2400               |                             | 31.2    | 38.4    | 38.4    | 42.4    | 46.0    | 46.0    | 48.6    | 53.6    | 56.2     | 56.2     | 56.2     | 57.2     | 57.6     | 58.0     | 58.3     | 60.5     |          |
| GE 2600               |                             | 38.4    | 38.4    | 38.4    | 42.4    | 46.0    | 46.0    | 48.6    | 53.6    | 56.2     | 56.2     | 56.2     | 57.2     | 57.6     | 58.0     | 58.3     | 60.5     |          |
| GE 2800               |                             | 38.4    | 38.4    | 38.4    | 42.4    | 46.0    | 46.0    | 48.6    | 53.6    | 56.2     | 56.2     | 56.2     | 57.2     | 57.6     | 58.0     | 58.3     | 60.5     |          |
| GE 3000               |                             | 38.4    | 38.4    | 38.4    | 42.4    | 46.0    | 46.0    | 48.6    | 53.6    | 56.2     | 56.2     | 56.2     | 57.2     | 57.6     | 58.0     | 58.3     | 60.5     |          |
| GE 3200               |                             | 38.4    | 38.4    | 38.4    | 42.4    | 46.0    | 46.0    | 48.6    | 53.6    | 56.2     | 56.2     | 56.2     | 57.2     | 57.6     | 58.0     | 58.3     | 60.5     |          |
| GE 3400               |                             | 38.4    | 38.4    | 38.4    | 42.4    | 46.0    | 46.0    | 48.6    | 53.6    | 56.2     | 56.2     | 56.2     | 57.2     | 57.6     | 58.0     | 58.3     | 60.5     |          |
| GE 3600               |                             | 38.4    | 38.4    | 38.4    | 42.4    | 46.0    | 46.0    | 48.6    | 53.6    | 56.2     | 56.2     | 56.2     | 57.2     | 57.6     | 58.0     | 58.3     | 60.5     |          |
| GE 3800               |                             | 38.4    | 38.4    | 38.4    | 42.4    | 46.0    | 46.0    | 48.6    | 53.6    | 56.2     | 56.2     | 56.2     | 57.2     | 57.6     | 58.0     | 58.3     | 60.5     |          |
| GE 4000               |                             | 38.4    | 38.4    | 38.4    | 42.4    | 46.0    | 46.0    | 48.6    | 53.6    | 56.2     | 56.2     | 56.2     | 57.2     | 57.6     | 58.0     | 58.3     | 60.5     |          |
| GE 4200               |                             | 38.4    | 38.4    | 38.4    | 42.4    | 46.0    | 46.0    | 48.6    | 53.6    | 56.2     | 56.2     | 56.2     | 57.2     | 57.6     | 58.0     | 58.3     | 60.5     |          |
| GE 4400               |                             | 38.4    | 38.4    | 38.4    | 42.4    | 46.0    | 46.0    | 48.6    | 53.6    | 56.2     | 56.2     | 56.2     | 57.2     | 57.6     | 58.0     | 58.3     | 60.5     |          |
| GE 4600               |                             | 38.4    | 38.4    | 38.4    | 42.4    | 46.0    | 46.0    | 48.6    | 53.6    | 56.2     | 56.2     | 56.2     | 57.2     | 57.6     | 58.0     | 58.3     | 60.5     |          |
| GE 4800               |                             | 38.4    | 38.4    | 38.4    | 42.4    | 46.0    | 46.0    | 48.6    | 53.6    | 56.2     | 56.2     | 56.2     | 57.2     | 57.6     | 58.0     | 58.3     | 60.5     |          |
| GE 5000               |                             | 38.4    | 38.4    | 38.4    | 42.4    | 46.0    | 46.0    | 48.6    | 53.6    | 56.2     | 56.2     | 56.2     | 57.2     | 57.6     | 58.0     | 58.3     | 60.5     |          |
| GE 5200               |                             | 38.4    | 38.4    | 38.4    | 42.4    | 46.0    | 46.0    | 48.6    | 53.6    | 56.2     | 56.2     | 56.2     | 57.2     | 57.6     | 58.0     | 58.3     | 60.5     |          |
| GE 5400               |                             | 38.4    | 38.4    | 38.4    | 42.4    | 46.0    | 46.0    | 48.6    | 53.6    | 56.2     | 56.2     | 56.2     | 57.2     | 57.6     | 58.0     | 58.3     | 60.5     |          |
| GE 5600               |                             | 38.4    | 38.4    | 38.4    | 42.4    | 46.0    | 46.0    | 48.6    | 53.6    | 56.2     | 56.2     | 56.2     | 57.2     | 57.6     | 58.0     | 58.3     | 60.5     |          |
| GE 5800               |                             | 38.4    | 38.4    | 38.4    | 42.4    | 46.0    | 46.0    | 48.6    | 53.6    | 56.2     | 56.2     | 56.2     | 57.2     | 57.6     | 58.0     | 58.3     | 60.5     |          |
| GE 6000               |                             | 38.4    | 38.4    | 38.4    | 42.4    | 46.0    | 46.0    | 48.6    | 53.6    | 56.2     | 56.2     | 56.2     | 57.2     | 57.6     | 58.0     | 58.3     | 60.5     |          |
| GE 6200               |                             | 38.4    | 38.4    | 38.4    | 42.4    | 46.0    | 46.0    | 48.6    | 53.6    | 56.2     | 56.2     | 56.2     | 57.2     | 57.6     | 58.0     | 58.3     | 60.5     |          |
| GE 6400               |                             | 38.4    | 38.4    | 38.4    | 42.4    | 46.0    | 46.0    | 48.6    | 53.6    | 56.2     | 56.2     | 56.2     | 57.2     | 57.6     | 58.0     | 58.3     | 60.5     |          |
| GE 6600               |                             | 38.4    | 38.4    | 38.4    | 42.4    | 46.0    | 46.0    | 48.6    | 53.6    | 56.2     | 56.2     | 56.2     | 57.2     | 57.6     | 58.0     | 58.3     | 60.5     |          |
| GE 6800               |                             | 38.4    | 38.4    | 38.4    | 42.4    | 46.0    | 46.0    | 48.6    | 53.6    | 56.2     | 56.2     | 56.2     | 57.2     | 57.6     | 58.0     | 58.3     | 60.5     |          |
| GE 7000               |                             | 38.4    | 38.4    | 38.4    | 42.4    | 46.0    | 46.0    | 48.6    | 53.6    | 56.2     | 56.2     | 56.2     | 57.2     | 57.6     | 58.0     | 58.3     | 60.5     |          |
| GE 7200               |                             | 38.4    | 38.4    | 38.4    | 42.4    | 46.0    | 46.0    | 48.6    | 53.6    | 56.2     | 56.2     | 56.2     | 57.2     | 57.6     | 58.0     | 58.3     | 60.5     |          |
| GE 7400               |                             | 38.4    | 38.4    | 38.4    | 42.4    | 46.0    | 46.0    | 48.6    | 53.6    | 56.2     | 56.2     | 56.2     | 57.2     | 57.6     | 58.0     | 58.3     | 60.5     |          |
| GE 7600               |                             | 38.4    | 38.4    | 38.4    | 42.4    | 46.0    | 46.0    | 48.6    | 53.6    | 56.2     | 56.2     | 56.2     | 57.2     | 57.6     | 58.0     | 58.3     | 60.5     |          |
| GE 7800               |                             | 38.4    | 38.4    | 38.4    | 42.4    | 46.0    | 46.0    | 48.6    | 53.6    | 56.2     | 56.2     | 56.2     | 57.2     | 57.6     | 58.0     | 58.3     | 60.5     |          |
| GE 8000               |                             | 38.4    | 38.4    | 38.4    | 42.4    | 46.0    | 46.0    | 48.6    | 53.6    | 56.2     | 56.2     | 56.2     | 57.2     | 57.6     | 58.0     | 58.3     | 60.5     |          |
| GE 8200               |                             | 38.4    | 38.4    | 38.4    | 42.4    | 46.0    | 46.0    | 48.6    | 53.6    | 56.2     | 56.2     | 56.2     | 57.2     | 57.6     | 58.0     | 58.3     | 60.5     |          |
| GE 8400               |                             | 38.4    | 38.4    | 38.4    | 42.4    | 46.0    | 46.0    | 48.6    | 53.6    | 56.2     | 56.2     | 56.2     | 57.2     | 57.6     | 58.0     | 58.3     | 60.5     |          |
| GE 8600               |                             | 38.4    | 38.4    | 38.4    | 42.4    | 46.0    | 46.0    | 48.6    | 53.6    | 56.2     | 56.2     | 56.2     | 57.2     | 57.6     | 58.0     | 58.3     | 60.5     |          |
| GE 8800               |                             | 38.4    | 38.4    | 38.4    | 42.4    | 46.0    | 46.0    | 48.6    | 53.6    | 56.2     | 56.2     | 56.2     | 57.2     | 57.6     | 58.0     | 58.3     | 60.5     |          |
| GE 9000               |                             | 38.4    | 38.4    | 38.4    | 42.4    | 46.0    | 46.0    | 48.6    | 53.6    | 56.2     | 56.2     | 56.2     | 57.2     | 57.6     | 58.0     | 58.3     | 60.5     |          |
| GE 9200               |                             | 38.4    | 38.4    | 38.4    | 42.4    | 46.0    | 46.0    | 48.6    | 53.6    | 56.2     | 56.2     | 56.2     | 57.2     | 57.6     | 58.0     | 58.3     | 60.5     |          |
| GE 9400               |                             | 38.4    | 38.4    | 38.4    | 42.4    | 46.0    | 46.0    | 48.6    | 53.6    | 56.2     | 56.2     | 56.2     | 57.2     | 57.6     | 58.0     | 58.3     | 60.5     |          |
| GE 9600               |                             | 38.4    | 38.4    | 38.4    | 42.4    | 46.0    | 46.0    | 48.6    | 53.6    | 56.2     | 56.2     | 56.2     | 57.2     | 57.6     | 58.0     | 58.3     | 60.5     |          |
| GE 9800               |                             | 38.4    | 38.4    | 38.4    | 42.4    | 46.0    | 46.0    | 48.6    | 53.6    | 56.2     | 56.2     | 56.2     | 57.2     | 57.6     | 58.0     | 58.3     | 60.5     |          |
| GE 10000              |                             | 38.4    | 38.4    | 38.4    | 42.4    | 46.0    | 46.0    | 48.6    | 53.6    | 56.2     | 56.2     | 56.2     | 57.2     | 57.6     | 58.0     | 58.3     | 60.5     |          |

TOTAL NUMBER OF OBSERVATIONS: 276

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/HAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 27595 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: FEB HOURS(LOCAL): 0600-0800

| CEILING<br>IN<br>FEET | VISIBILITY IN STATUTE MILES |         |         |         |         |         |             |         |             |             |         |           |           |           |            |           |
|-----------------------|-----------------------------|---------|---------|---------|---------|---------|-------------|---------|-------------|-------------|---------|-----------|-----------|-----------|------------|-----------|
|                       | GE<br>10                    | GE<br>6 | GE<br>5 | GE<br>4 | GE<br>3 | GE<br>2 | GE<br>1 1/2 | GE<br>1 | GE<br>1 1/4 | GE<br>1 1/4 | GE<br>1 | GE<br>3/4 | GE<br>5/8 | GE<br>1/2 | GE<br>5/16 | GE<br>1/4 |
| NO CEIL               |                             | 25.5    | 25.5    | 25.5    | 25.5    | 25.5    | 25.5        | 25.5    | 25.5        | 25.5        | 25.5    | 25.5      | 25.5      | 25.5      | 25.5       | 25.5      |
| GE 7000               |                             | 23.8    | 23.8    | 23.8    | 23.8    | 23.8    | 23.8        | 23.8    | 23.8        | 23.8        | 23.8    | 23.8      | 23.8      | 23.8      | 23.8       | 23.8      |
| GE 1800               |                             | 23.8    | 23.8    | 23.8    | 23.8    | 23.8    | 23.8        | 23.8    | 23.8        | 23.8        | 23.8    | 23.8      | 23.8      | 23.8      | 23.8       | 23.8      |
| GE 1600               |                             | 23.8    | 23.8    | 23.8    | 23.8    | 23.8    | 23.8        | 23.8    | 23.8        | 23.8        | 23.8    | 23.8      | 23.8      | 23.8      | 23.8       | 23.8      |
| GE 1400               |                             | 23.8    | 23.8    | 23.8    | 23.8    | 23.8    | 23.8        | 23.8    | 23.8        | 23.8        | 23.8    | 23.8      | 23.8      | 23.8      | 23.8       | 23.8      |
| GE 1200               |                             | 23.8    | 23.8    | 23.8    | 23.8    | 23.8    | 23.8        | 23.8    | 23.8        | 23.8        | 23.8    | 23.8      | 23.8      | 23.8      | 23.8       | 23.8      |
| GE 1000               |                             | 35.2    | 35.2    | 35.2    | 35.2    | 35.2    | 35.2        | 35.2    | 35.2        | 35.2        | 35.2    | 35.2      | 35.2      | 35.2      | 35.2       | 35.2      |
| GE 900                |                             | 35.2    | 35.2    | 35.2    | 35.2    | 35.2    | 35.2        | 35.2    | 35.2        | 35.2        | 35.2    | 35.2      | 35.2      | 35.2      | 35.2       | 35.2      |
| GE 800                |                             | 35.2    | 35.2    | 35.2    | 35.2    | 35.2    | 35.2        | 35.2    | 35.2        | 35.2        | 35.2    | 35.2      | 35.2      | 35.2      | 35.2       | 35.2      |
| GE 700                |                             | 35.2    | 35.2    | 35.2    | 35.2    | 35.2    | 35.2        | 35.2    | 35.2        | 35.2        | 35.2    | 35.2      | 35.2      | 35.2      | 35.2       | 35.2      |
| GE 600                |                             | 35.2    | 35.2    | 35.2    | 35.2    | 35.2    | 35.2        | 35.2    | 35.2        | 35.2        | 35.2    | 35.2      | 35.2      | 35.2      | 35.2       | 35.2      |
| GE 500                |                             | 36.6    | 36.6    | 36.6    | 36.6    | 36.6    | 36.6        | 36.6    | 36.6        | 36.6        | 36.6    | 36.6      | 36.6      | 36.6      | 36.6       | 36.6      |
| GE 400                |                             | 36.6    | 36.6    | 36.6    | 36.6    | 36.6    | 36.6        | 36.6    | 36.6        | 36.6        | 36.6    | 36.6      | 36.6      | 36.6      | 36.6       | 36.6      |
| GE 300                |                             | 37.4    | 37.4    | 37.4    | 37.4    | 37.4    | 37.4        | 37.4    | 37.4        | 37.4        | 37.4    | 37.4      | 37.4      | 37.4      | 37.4       | 37.4      |
| GE 200                |                             | 38.5    | 38.5    | 38.5    | 38.5    | 38.5    | 38.5        | 38.5    | 38.5        | 38.5        | 38.5    | 38.5      | 38.5      | 38.5      | 38.5       | 38.5      |
| GE 100                |                             | 38.5    | 38.5    | 38.5    | 38.5    | 38.5    | 38.5        | 38.5    | 38.5        | 38.5        | 38.5    | 38.5      | 38.5      | 38.5      | 38.5       | 38.5      |
| GE 2500               |                             | 40.3    | 40.3    | 40.3    | 40.3    | 40.3    | 40.3        | 40.3    | 40.3        | 40.3        | 40.3    | 40.3      | 40.3      | 40.3      | 40.3       | 40.3      |
| GE 2000               |                             | 41.8    | 41.8    | 41.8    | 41.8    | 41.8    | 41.8        | 41.8    | 41.8        | 41.8        | 41.8    | 41.8      | 41.8      | 41.8      | 41.8       | 41.8      |
| GE 1800               |                             | 42.1    | 42.1    | 42.1    | 42.1    | 42.1    | 42.1        | 42.1    | 42.1        | 42.1        | 42.1    | 42.1      | 42.1      | 42.1      | 42.1       | 42.1      |
| GE 1600               |                             | 42.1    | 42.1    | 42.1    | 42.1    | 42.1    | 42.1        | 42.1    | 42.1        | 42.1        | 42.1    | 42.1      | 42.1      | 42.1      | 42.1       | 42.1      |
| GE 1400               |                             | 42.1    | 42.1    | 42.1    | 42.1    | 42.1    | 42.1        | 42.1    | 42.1        | 42.1        | 42.1    | 42.1      | 42.1      | 42.1      | 42.1       | 42.1      |
| GE 1200               |                             | 46.2    | 46.2    | 46.2    | 46.2    | 46.2    | 46.2        | 46.2    | 46.2        | 46.2        | 46.2    | 46.2      | 46.2      | 46.2      | 46.2       | 46.2      |
| GE 1000               |                             | 46.2    | 46.2    | 46.2    | 46.2    | 46.2    | 46.2        | 46.2    | 46.2        | 46.2        | 46.2    | 46.2      | 46.2      | 46.2      | 46.2       | 46.2      |
| GE 900                |                             | 46.2    | 46.2    | 46.2    | 46.2    | 46.2    | 46.2        | 46.2    | 46.2        | 46.2        | 46.2    | 46.2      | 46.2      | 46.2      | 46.2       | 46.2      |
| GE 800                |                             | 46.2    | 46.2    | 46.2    | 46.2    | 46.2    | 46.2        | 46.2    | 46.2        | 46.2        | 46.2    | 46.2      | 46.2      | 46.2      | 46.2       | 46.2      |
| GE 700                |                             | 49.5    | 49.5    | 49.5    | 49.5    | 49.5    | 49.5        | 49.5    | 49.5        | 49.5        | 49.5    | 49.5      | 49.5      | 49.5      | 49.5       | 49.5      |
| GE 600                |                             | 49.5    | 49.5    | 49.5    | 49.5    | 49.5    | 49.5        | 49.5    | 49.5        | 49.5        | 49.5    | 49.5      | 49.5      | 49.5      | 49.5       | 49.5      |
| GE 500                |                             | 51.6    | 51.6    | 51.6    | 51.6    | 51.6    | 51.6        | 51.6    | 51.6        | 51.6        | 51.6    | 51.6      | 51.6      | 51.6      | 51.6       | 51.6      |
| GE 400                |                             | 51.6    | 51.6    | 51.6    | 51.6    | 51.6    | 51.6        | 51.6    | 51.6        | 51.6        | 51.6    | 51.6      | 51.6      | 51.6      | 51.6       | 51.6      |
| GE 300                |                             | 51.6    | 51.6    | 51.6    | 51.6    | 51.6    | 51.6        | 51.6    | 51.6        | 51.6        | 51.6    | 51.6      | 51.6      | 51.6      | 51.6       | 51.6      |
| GE 200                |                             | 51.6    | 51.6    | 51.6    | 51.6    | 51.6    | 51.6        | 51.6    | 51.6        | 51.6        | 51.6    | 51.6      | 51.6      | 51.6      | 51.6       | 51.6      |
| GE 100                |                             | 51.6    | 51.6    | 51.6    | 51.6    | 51.6    | 51.6        | 51.6    | 51.6        | 51.6        | 51.6    | 51.6      | 51.6      | 51.6      | 51.6       | 51.6      |
| GE 0                  |                             | 51.6    | 51.6    | 51.6    | 51.6    | 51.6    | 51.6        | 51.6    | 51.6        | 51.6        | 51.6    | 51.6      | 51.6      | 51.6      | 51.6       | 51.6      |

TOTAL NUMBER OF OBSERVATIONS: 273

GLOBAL CLIMATOLOGY BRANCH  
USAF/FLTAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 270500 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 76-87

MONTH: FEB HOURS(IST): 0900-1100

| CEILING  |      | VISIBILITY IN STATUTE MILES |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|----------|------|-----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| IN       | FEET | GE                          | GE   | GE   | GE   | GE   | GE   | GE   | GE   | GE   | GE   | GE   | GE   | GE   | GE   | GE   | GE   |
|          |      | 1                           | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   |
| NO CEIL  |      | 71.1                        | 61.1 | 51.1 | 41.6 | 34.6 | 24.6 | 24.6 | 26.4 | 27.6 | 30.1 | 30.6 | 31.3 | 32.5 | 32.9 | 33.3 | 34.1 |
| GE 20000 |      | 23.6                        | 23.6 | 23.6 | 26.4 | 28.0 | 28.0 | 29.7 | 30.9 | 33.3 | 33.7 | 34.6 | 35.8 | 36.2 | 36.6 | 37.4 | 37.4 |
| GE 18000 |      | 23.6                        | 23.6 | 23.6 | 26.4 | 28.0 | 28.0 | 29.7 | 30.9 | 33.3 | 33.7 | 34.6 | 35.8 | 36.2 | 36.6 | 37.4 | 37.4 |
| GE 16000 |      | 23.6                        | 23.6 | 23.6 | 26.4 | 28.0 | 28.0 | 29.7 | 30.9 | 33.3 | 33.7 | 34.6 | 35.8 | 36.2 | 36.6 | 37.4 | 37.4 |
| GE 14000 |      | 23.6                        | 23.6 | 23.6 | 26.4 | 28.0 | 28.0 | 29.7 | 30.9 | 33.3 | 33.7 | 34.6 | 35.8 | 36.2 | 36.6 | 37.4 | 37.4 |
| GE 12000 |      | 23.6                        | 23.6 | 23.6 | 26.4 | 28.0 | 28.0 | 29.7 | 30.9 | 33.3 | 33.7 | 34.6 | 35.8 | 36.2 | 36.6 | 37.4 | 37.4 |
| GE 10000 |      | 36.2                        | 37.0 | 37.0 | 42.3 | 48.0 | 48.0 | 50.8 | 54.5 | 57.7 | 58.9 | 59.8 | 61.0 | 62.2 | 63.0 | 64.2 | 64.2 |
| GE 9000  |      | 36.2                        | 37.0 | 37.0 | 42.3 | 48.0 | 48.0 | 50.8 | 54.5 | 57.7 | 58.9 | 59.8 | 61.0 | 62.2 | 63.0 | 64.2 | 64.2 |
| GE 8000  |      | 36.2                        | 37.0 | 37.0 | 42.3 | 48.0 | 48.0 | 50.8 | 54.5 | 57.7 | 58.9 | 59.8 | 61.0 | 62.2 | 63.0 | 64.2 | 64.2 |
| GE 7000  |      | 36.2                        | 37.0 | 37.0 | 42.3 | 48.0 | 48.0 | 50.8 | 54.5 | 57.7 | 58.9 | 59.8 | 61.0 | 62.2 | 63.0 | 64.2 | 64.2 |
| GE 6000  |      | 36.2                        | 37.0 | 37.0 | 42.3 | 48.0 | 48.0 | 50.8 | 54.5 | 57.7 | 58.9 | 59.8 | 61.0 | 62.2 | 63.0 | 64.2 | 64.2 |
| GE 5000  |      | 36.2                        | 37.0 | 37.0 | 42.3 | 48.0 | 48.0 | 50.8 | 54.5 | 57.7 | 58.9 | 59.8 | 61.0 | 62.2 | 63.0 | 64.2 | 64.2 |
| GE 4000  |      | 36.2                        | 37.0 | 37.0 | 42.3 | 48.0 | 48.0 | 50.8 | 54.5 | 57.7 | 58.9 | 59.8 | 61.0 | 62.2 | 63.0 | 64.2 | 64.2 |
| GE 3000  |      | 36.2                        | 37.0 | 37.0 | 42.3 | 48.0 | 48.0 | 50.8 | 54.5 | 57.7 | 58.9 | 59.8 | 61.0 | 62.2 | 63.0 | 64.2 | 64.2 |
| GE 2000  |      | 36.2                        | 37.0 | 37.0 | 42.3 | 48.0 | 48.0 | 50.8 | 54.5 | 57.7 | 58.9 | 59.8 | 61.0 | 62.2 | 63.0 | 64.2 | 64.2 |
| GE 1000  |      | 36.2                        | 37.0 | 37.0 | 42.3 | 48.0 | 48.0 | 50.8 | 54.5 | 57.7 | 58.9 | 59.8 | 61.0 | 62.2 | 63.0 | 64.2 | 64.2 |
| GE 0000  |      | 36.2                        | 37.0 | 37.0 | 42.3 | 48.0 | 48.0 | 50.8 | 54.5 | 57.7 | 58.9 | 59.8 | 61.0 | 62.2 | 63.0 | 64.2 | 64.2 |
| GE 20000 | .4   | 71.4                        | 61.4 | 51.4 | 41.9 | 34.9 | 24.9 | 24.9 | 26.7 | 27.9 | 30.4 | 30.9 | 31.6 | 32.8 | 33.2 | 33.6 | 34.4 |
| GE 18000 | .4   | 71.4                        | 61.4 | 51.4 | 41.9 | 34.9 | 24.9 | 24.9 | 26.7 | 27.9 | 30.4 | 30.9 | 31.6 | 32.8 | 33.2 | 33.6 | 34.4 |
| GE 16000 | .4   | 71.4                        | 61.4 | 51.4 | 41.9 | 34.9 | 24.9 | 24.9 | 26.7 | 27.9 | 30.4 | 30.9 | 31.6 | 32.8 | 33.2 | 33.6 | 34.4 |
| GE 14000 | .4   | 71.4                        | 61.4 | 51.4 | 41.9 | 34.9 | 24.9 | 24.9 | 26.7 | 27.9 | 30.4 | 30.9 | 31.6 | 32.8 | 33.2 | 33.6 | 34.4 |
| GE 12000 | .4   | 71.4                        | 61.4 | 51.4 | 41.9 | 34.9 | 24.9 | 24.9 | 26.7 | 27.9 | 30.4 | 30.9 | 31.6 | 32.8 | 33.2 | 33.6 | 34.4 |
| GE 10000 | .4   | 71.4                        | 61.4 | 51.4 | 41.9 | 34.9 | 24.9 | 24.9 | 26.7 | 27.9 | 30.4 | 30.9 | 31.6 | 32.8 | 33.2 | 33.6 | 34.4 |
| GE 9000  | .4   | 71.4                        | 61.4 | 51.4 | 41.9 | 34.9 | 24.9 | 24.9 | 26.7 | 27.9 | 30.4 | 30.9 | 31.6 | 32.8 | 33.2 | 33.6 | 34.4 |
| GE 8000  | .4   | 71.4                        | 61.4 | 51.4 | 41.9 | 34.9 | 24.9 | 24.9 | 26.7 | 27.9 | 30.4 | 30.9 | 31.6 | 32.8 | 33.2 | 33.6 | 34.4 |
| GE 7000  | .4   | 71.4                        | 61.4 | 51.4 | 41.9 | 34.9 | 24.9 | 24.9 | 26.7 | 27.9 | 30.4 | 30.9 | 31.6 | 32.8 | 33.2 | 33.6 | 34.4 |
| GE 6000  | .4   | 71.4                        | 61.4 | 51.4 | 41.9 | 34.9 | 24.9 | 24.9 | 26.7 | 27.9 | 30.4 | 30.9 | 31.6 | 32.8 | 33.2 | 33.6 | 34.4 |
| GE 5000  | .4   | 71.4                        | 61.4 | 51.4 | 41.9 | 34.9 | 24.9 | 24.9 | 26.7 | 27.9 | 30.4 | 30.9 | 31.6 | 32.8 | 33.2 | 33.6 | 34.4 |
| GE 4000  | .4   | 71.4                        | 61.4 | 51.4 | 41.9 | 34.9 | 24.9 | 24.9 | 26.7 | 27.9 | 30.4 | 30.9 | 31.6 | 32.8 | 33.2 | 33.6 | 34.4 |
| GE 3000  | .4   | 71.4                        | 61.4 | 51.4 | 41.9 | 34.9 | 24.9 | 24.9 | 26.7 | 27.9 | 30.4 | 30.9 | 31.6 | 32.8 | 33.2 | 33.6 | 34.4 |
| GE 2000  | .4   | 71.4                        | 61.4 | 51.4 | 41.9 | 34.9 | 24.9 | 24.9 | 26.7 | 27.9 | 30.4 | 30.9 | 31.6 | 32.8 | 33.2 | 33.6 | 34.4 |
| GE 1000  | .4   | 71.4                        | 61.4 | 51.4 | 41.9 | 34.9 | 24.9 | 24.9 | 26.7 | 27.9 | 30.4 | 30.9 | 31.6 | 32.8 | 33.2 | 33.6 | 34.4 |
| GE 0000  | .4   | 71.4                        | 61.4 | 51.4 | 41.9 | 34.9 | 24.9 | 24.9 | 26.7 | 27.9 | 30.4 | 30.9 | 31.6 | 32.8 | 33.2 | 33.6 | 34.4 |

TOTAL NUMBER OF OBSERVATIONS: 246

GLOBAL CLIMATOLOGY BRANCH  
USAF/CLAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 27525 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: FEB HOURS (LST): 1200-1400

| CEILING<br>IN<br>FEET | VISIBILITY IN STATUTE MILES |         |         |         |         |          |          |          |          |          |          |          |          |          |          |          |
|-----------------------|-----------------------------|---------|---------|---------|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
|                       | GE<br>1                     | GE<br>3 | GE<br>5 | GE<br>7 | GE<br>9 | GE<br>11 | GE<br>13 | GE<br>15 | GE<br>17 | GE<br>19 | GE<br>21 | GE<br>23 | GE<br>25 | GE<br>27 | GE<br>29 | GE<br>31 |
| NO CEIL               |                             | 28.3    | 28.3    | 28.3    | 28.3    | 28.3     | 28.3     | 28.3     | 28.3     | 28.3     | 28.3     | 28.3     | 28.3     | 28.3     | 28.3     | 28.3     |
| GE 2000               |                             | 31.6    | 31.6    | 31.6    | 31.6    | 31.6     | 31.6     | 31.6     | 31.6     | 31.6     | 31.6     | 31.6     | 31.6     | 31.6     | 31.6     | 31.6     |
| GE 1800               |                             | 31.6    | 31.6    | 31.6    | 31.6    | 31.6     | 31.6     | 31.6     | 31.6     | 31.6     | 31.6     | 31.6     | 31.6     | 31.6     | 31.6     | 31.6     |
| GE 1600               |                             | 31.6    | 31.6    | 31.6    | 31.6    | 31.6     | 31.6     | 31.6     | 31.6     | 31.6     | 31.6     | 31.6     | 31.6     | 31.6     | 31.6     | 31.6     |
| GE 1400               |                             | 31.6    | 31.6    | 31.6    | 31.6    | 31.6     | 31.6     | 31.6     | 31.6     | 31.6     | 31.6     | 31.6     | 31.6     | 31.6     | 31.6     | 31.6     |
| GE 1200               |                             | 31.6    | 31.6    | 31.6    | 31.6    | 31.6     | 31.6     | 31.6     | 31.6     | 31.6     | 31.6     | 31.6     | 31.6     | 31.6     | 31.6     | 31.6     |
| GE 1000               |                             | 44.1    | 44.1    | 44.1    | 44.1    | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     |
| GE 900                |                             | 44.1    | 44.1    | 44.1    | 44.1    | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     |
| GE 800                |                             | 44.1    | 44.1    | 44.1    | 44.1    | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     |
| GE 700                |                             | 44.1    | 44.1    | 44.1    | 44.1    | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     |
| GE 600                |                             | 44.1    | 44.1    | 44.1    | 44.1    | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     |
| GE 500                |                             | 44.1    | 44.1    | 44.1    | 44.1    | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     |
| GE 400                |                             | 44.1    | 44.1    | 44.1    | 44.1    | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     |
| GE 300                |                             | 44.1    | 44.1    | 44.1    | 44.1    | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     |
| GE 200                |                             | 44.1    | 44.1    | 44.1    | 44.1    | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     |
| GE 100                |                             | 44.1    | 44.1    | 44.1    | 44.1    | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     |
| GE 0                  |                             | 44.1    | 44.1    | 44.1    | 44.1    | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     |
| GE 2000               |                             | 44.1    | 44.1    | 44.1    | 44.1    | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     |
| GE 1800               |                             | 44.1    | 44.1    | 44.1    | 44.1    | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     |
| GE 1600               |                             | 44.1    | 44.1    | 44.1    | 44.1    | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     |
| GE 1400               |                             | 44.1    | 44.1    | 44.1    | 44.1    | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     |
| GE 1200               |                             | 44.1    | 44.1    | 44.1    | 44.1    | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     |
| GE 1000               |                             | 44.1    | 44.1    | 44.1    | 44.1    | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     |
| GE 900                |                             | 44.1    | 44.1    | 44.1    | 44.1    | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     |
| GE 800                |                             | 44.1    | 44.1    | 44.1    | 44.1    | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     |
| GE 700                |                             | 44.1    | 44.1    | 44.1    | 44.1    | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     |
| GE 600                |                             | 44.1    | 44.1    | 44.1    | 44.1    | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     |
| GE 500                |                             | 44.1    | 44.1    | 44.1    | 44.1    | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     |
| GE 400                |                             | 44.1    | 44.1    | 44.1    | 44.1    | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     |
| GE 300                |                             | 44.1    | 44.1    | 44.1    | 44.1    | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     |
| GE 200                |                             | 44.1    | 44.1    | 44.1    | 44.1    | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     |
| GE 100                |                             | 44.1    | 44.1    | 44.1    | 44.1    | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     |
| GE 0                  |                             | 44.1    | 44.1    | 44.1    | 44.1    | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     | 44.1     |

TOTAL NUMBER OF OBSERVATIONS: 272

GLOBAL CLIMATOLOGY BRANCH  
USAFETAL  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275950 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: FEB HOURS (LST): 1500-1700

| CEILING<br>IN<br>FEET | VISIBILITY IN STATUTE MILES |       |   |       |   |       |   |       |   |       |   |       |   |       |   |   |
|-----------------------|-----------------------------|-------|---|-------|---|-------|---|-------|---|-------|---|-------|---|-------|---|---|
|                       | 1                           | 1 1/2 | 2 | 2 1/2 | 3 | 3 1/2 | 4 | 4 1/2 | 5 | 5 1/2 | 6 | 6 1/2 | 7 | 7 1/2 | 8 | 9 |
| NO CEIL               |                             |       |   |       |   |       |   |       |   |       |   |       |   |       |   |   |
| GE 2000               |                             |       |   |       |   |       |   |       |   |       |   |       |   |       |   |   |
| GE 1800               |                             |       |   |       |   |       |   |       |   |       |   |       |   |       |   |   |
| GE 1600               |                             |       |   |       |   |       |   |       |   |       |   |       |   |       |   |   |
| GE 1400               |                             |       |   |       |   |       |   |       |   |       |   |       |   |       |   |   |
| GE 1200               |                             |       |   |       |   |       |   |       |   |       |   |       |   |       |   |   |
| GE 1000               |                             |       |   |       |   |       |   |       |   |       |   |       |   |       |   |   |
| GE 900                |                             |       |   |       |   |       |   |       |   |       |   |       |   |       |   |   |
| GE 800                |                             |       |   |       |   |       |   |       |   |       |   |       |   |       |   |   |
| GE 700                |                             |       |   |       |   |       |   |       |   |       |   |       |   |       |   |   |
| GE 600                |                             |       |   |       |   |       |   |       |   |       |   |       |   |       |   |   |
| GE 500                |                             |       |   |       |   |       |   |       |   |       |   |       |   |       |   |   |
| GE 400                |                             |       |   |       |   |       |   |       |   |       |   |       |   |       |   |   |
| GE 300                |                             |       |   |       |   |       |   |       |   |       |   |       |   |       |   |   |
| GE 200                |                             |       |   |       |   |       |   |       |   |       |   |       |   |       |   |   |
| GE 100                |                             |       |   |       |   |       |   |       |   |       |   |       |   |       |   |   |
| GE 0                  |                             |       |   |       |   |       |   |       |   |       |   |       |   |       |   |   |

TOTAL NUMBER OF OBSERVATIONS: 272

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275950 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: FEB HOURS(IST): 1800-2300

| CEILING<br>IN<br>FEET | VISIBILITY IN STATUTE MILES |          |         |         |         |         |             |         |             |             |         |           |           |           |            |           |
|-----------------------|-----------------------------|----------|---------|---------|---------|---------|-------------|---------|-------------|-------------|---------|-----------|-----------|-----------|------------|-----------|
|                       | GE<br>1                     | GE<br>10 | GE<br>5 | GE<br>4 | GE<br>3 | GE<br>2 | GE<br>1 1/2 | GE<br>2 | GE<br>1 1/2 | GE<br>1 1/4 | GE<br>1 | GE<br>3/4 | GE<br>5/8 | GE<br>1/2 | GE<br>5/16 | GE<br>1/4 |
| NO CEIL               | .4                          | 70.5     | 30.9    | 30.9    | 33.8    | 37.1    | 37.1        | 39.2    | 41.4        | 41.4        | 42.1    | 42.4      | 42.4      | 42.4      | 42.4       | 42.4      |
| GE 20000              | .4                          | 34.5     | 34.5    | 34.5    | 38.1    | 41.4    | 41.4        | 43.5    | 46.0        | 46.0        | 46.0    | 46.0      | 47.1      | 47.1      | 47.1       | 47.5      |
| GE 15000              | .4                          | 34.5     | 34.5    | 34.5    | 38.1    | 41.4    | 41.4        | 43.5    | 46.0        | 46.0        | 46.0    | 46.0      | 47.1      | 47.1      | 47.1       | 47.5      |
| GE 10000              | .4                          | 34.5     | 34.5    | 34.5    | 38.1    | 41.4    | 41.4        | 43.5    | 46.0        | 46.0        | 46.0    | 46.0      | 47.1      | 47.1      | 47.1       | 47.5      |
| GE 7000               | .4                          | 34.5     | 34.5    | 34.5    | 38.1    | 41.4    | 41.4        | 43.5    | 46.0        | 46.0        | 46.0    | 46.0      | 47.1      | 47.1      | 47.1       | 47.5      |
| GE 5000               | .4                          | 34.5     | 34.5    | 34.5    | 38.1    | 41.4    | 41.4        | 43.5    | 46.0        | 46.0        | 46.0    | 46.0      | 47.1      | 47.1      | 47.1       | 47.5      |
| GE 4000               | .7                          | 48.2     | 48.2    | 48.2    | 52.9    | 57.2    | 57.2        | 59.7    | 64.7        | 65.1        | 66.2    | 66.5      | 66.9      | 67.3      | 67.3       | 67.6      |
| GE 3000               | .7                          | 48.2     | 48.2    | 48.2    | 52.9    | 57.2    | 57.2        | 59.7    | 64.7        | 65.1        | 66.2    | 66.5      | 66.9      | 67.3      | 67.3       | 67.6      |
| GE 2000               | .7                          | 48.2     | 48.2    | 48.2    | 52.9    | 57.2    | 57.2        | 59.7    | 64.7        | 65.1        | 66.2    | 66.5      | 66.9      | 67.3      | 67.3       | 67.6      |
| GE 1800               | .7                          | 48.2     | 48.2    | 48.2    | 52.9    | 57.2    | 57.2        | 59.7    | 64.7        | 65.1        | 66.2    | 66.5      | 66.9      | 67.3      | 67.3       | 67.6      |
| GE 1600               | .7                          | 48.2     | 48.2    | 48.2    | 52.9    | 57.2    | 57.2        | 59.7    | 64.7        | 65.1        | 66.2    | 66.5      | 66.9      | 67.3      | 67.3       | 67.6      |
| GE 1400               | .7                          | 48.2     | 48.2    | 48.2    | 52.9    | 57.2    | 57.2        | 59.7    | 64.7        | 65.1        | 66.2    | 66.5      | 66.9      | 67.3      | 67.3       | 67.6      |
| GE 1200               | .7                          | 48.2     | 48.2    | 48.2    | 52.9    | 57.2    | 57.2        | 59.7    | 64.7        | 65.1        | 66.2    | 66.5      | 66.9      | 67.3      | 67.3       | 67.6      |
| GE 1000               | .7                          | 48.2     | 48.2    | 48.2    | 52.9    | 57.2    | 57.2        | 59.7    | 64.7        | 65.1        | 66.2    | 66.5      | 66.9      | 67.3      | 67.3       | 67.6      |
| GE 900                | .7                          | 48.2     | 48.2    | 48.2    | 52.9    | 57.2    | 57.2        | 59.7    | 64.7        | 65.1        | 66.2    | 66.5      | 66.9      | 67.3      | 67.3       | 67.6      |
| GE 800                | .7                          | 48.2     | 48.2    | 48.2    | 52.9    | 57.2    | 57.2        | 59.7    | 64.7        | 65.1        | 66.2    | 66.5      | 66.9      | 67.3      | 67.3       | 67.6      |
| GE 700                | .7                          | 48.2     | 48.2    | 48.2    | 52.9    | 57.2    | 57.2        | 59.7    | 64.7        | 65.1        | 66.2    | 66.5      | 66.9      | 67.3      | 67.3       | 67.6      |
| GE 600                | .7                          | 48.2     | 48.2    | 48.2    | 52.9    | 57.2    | 57.2        | 59.7    | 64.7        | 65.1        | 66.2    | 66.5      | 66.9      | 67.3      | 67.3       | 67.6      |
| GE 500                | .7                          | 48.2     | 48.2    | 48.2    | 52.9    | 57.2    | 57.2        | 59.7    | 64.7        | 65.1        | 66.2    | 66.5      | 66.9      | 67.3      | 67.3       | 67.6      |
| GE 450                | .7                          | 48.2     | 48.2    | 48.2    | 52.9    | 57.2    | 57.2        | 59.7    | 64.7        | 65.1        | 66.2    | 66.5      | 66.9      | 67.3      | 67.3       | 67.6      |
| GE 400                | .7                          | 48.2     | 48.2    | 48.2    | 52.9    | 57.2    | 57.2        | 59.7    | 64.7        | 65.1        | 66.2    | 66.5      | 66.9      | 67.3      | 67.3       | 67.6      |
| GE 350                | .7                          | 48.2     | 48.2    | 48.2    | 52.9    | 57.2    | 57.2        | 59.7    | 64.7        | 65.1        | 66.2    | 66.5      | 66.9      | 67.3      | 67.3       | 67.6      |
| GE 300                | .7                          | 48.2     | 48.2    | 48.2    | 52.9    | 57.2    | 57.2        | 59.7    | 64.7        | 65.1        | 66.2    | 66.5      | 66.9      | 67.3      | 67.3       | 67.6      |
| GE 250                | .7                          | 48.2     | 48.2    | 48.2    | 52.9    | 57.2    | 57.2        | 59.7    | 64.7        | 65.1        | 66.2    | 66.5      | 66.9      | 67.3      | 67.3       | 67.6      |
| GE 200                | .7                          | 48.2     | 48.2    | 48.2    | 52.9    | 57.2    | 57.2        | 59.7    | 64.7        | 65.1        | 66.2    | 66.5      | 66.9      | 67.3      | 67.3       | 67.6      |
| GE 180                | .7                          | 48.2     | 48.2    | 48.2    | 52.9    | 57.2    | 57.2        | 59.7    | 64.7        | 65.1        | 66.2    | 66.5      | 66.9      | 67.3      | 67.3       | 67.6      |
| GE 160                | .7                          | 48.2     | 48.2    | 48.2    | 52.9    | 57.2    | 57.2        | 59.7    | 64.7        | 65.1        | 66.2    | 66.5      | 66.9      | 67.3      | 67.3       | 67.6      |
| GE 140                | .7                          | 48.2     | 48.2    | 48.2    | 52.9    | 57.2    | 57.2        | 59.7    | 64.7        | 65.1        | 66.2    | 66.5      | 66.9      | 67.3      | 67.3       | 67.6      |
| GE 120                | .7                          | 48.2     | 48.2    | 48.2    | 52.9    | 57.2    | 57.2        | 59.7    | 64.7        | 65.1        | 66.2    | 66.5      | 66.9      | 67.3      | 67.3       | 67.6      |
| GE 100                | .7                          | 48.2     | 48.2    | 48.2    | 52.9    | 57.2    | 57.2        | 59.7    | 64.7        | 65.1        | 66.2    | 66.5      | 66.9      | 67.3      | 67.3       | 67.6      |
| GE 90                 | .7                          | 48.2     | 48.2    | 48.2    | 52.9    | 57.2    | 57.2        | 59.7    | 64.7        | 65.1        | 66.2    | 66.5      | 66.9      | 67.3      | 67.3       | 67.6      |
| GE 80                 | .7                          | 48.2     | 48.2    | 48.2    | 52.9    | 57.2    | 57.2        | 59.7    | 64.7        | 65.1        | 66.2    | 66.5      | 66.9      | 67.3      | 67.3       | 67.6      |
| GE 70                 | .7                          | 48.2     | 48.2    | 48.2    | 52.9    | 57.2    | 57.2        | 59.7    | 64.7        | 65.1        | 66.2    | 66.5      | 66.9      | 67.3      | 67.3       | 67.6      |
| GE 60                 | .7                          | 48.2     | 48.2    | 48.2    | 52.9    | 57.2    | 57.2        | 59.7    | 64.7        | 65.1        | 66.2    | 66.5      | 66.9      | 67.3      | 67.3       | 67.6      |
| GE 50                 | .7                          | 48.2     | 48.2    | 48.2    | 52.9    | 57.2    | 57.2        | 59.7    | 64.7        | 65.1        | 66.2    | 66.5      | 66.9      | 67.3      | 67.3       | 67.6      |
| GE 40                 | .7                          | 48.2     | 48.2    | 48.2    | 52.9    | 57.2    | 57.2        | 59.7    | 64.7        | 65.1        | 66.2    | 66.5      | 66.9      | 67.3      | 67.3       | 67.6      |
| GE 30                 | .7                          | 48.2     | 48.2    | 48.2    | 52.9    | 57.2    | 57.2        | 59.7    | 64.7        | 65.1        | 66.2    | 66.5      | 66.9      | 67.3      | 67.3       | 67.6      |
| GE 20                 | .7                          | 48.2     | 48.2    | 48.2    | 52.9    | 57.2    | 57.2        | 59.7    | 64.7        | 65.1        | 66.2    | 66.5      | 66.9      | 67.3      | 67.3       | 67.6      |
| GE 10                 | .7                          | 48.2     | 48.2    | 48.2    | 52.9    | 57.2    | 57.2        | 59.7    | 64.7        | 65.1        | 66.2    | 66.5      | 66.9      | 67.3      | 67.3       | 67.6      |
| GE 0                  | .7                          | 48.2     | 48.2    | 48.2    | 52.9    | 57.2    | 57.2        | 59.7    | 64.7        | 65.1        | 66.2    | 66.5      | 66.9      | 67.3      | 67.3       | 67.6      |

TOTAL NUMBER OF OBSERVATIONS: 778

GLOBAL CLIMATOLOGY BRANCH  
USAF/ETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM FOURLY OBSERVATIONS

STATION NUMBER: 235000 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: FEB HOURS (LST): 2100-2300

| CEILING<br>IN<br>FEET | VISIBILITY IN STATUTE MILES |       |      |      |      |      |      |          |      |          |          |      |        |        |        |         |        |       |
|-----------------------|-----------------------------|-------|------|------|------|------|------|----------|------|----------|----------|------|--------|--------|--------|---------|--------|-------|
|                       | 1                           | GE 10 | GE 6 | GE 5 | GE 4 | GE 3 | GE 2 | GE 1 1/2 | GE 2 | GE 1 1/2 | GE 1 1/4 | GE 1 | GE 3/4 | GE 5/8 | GE 1/2 | GE 5/16 | GE 1/4 | GE 0  |
| NO CEIL               |                             |       | 31.9 | 31.9 | 31.9 | 34.4 | 37.7 | 37.7     | 39.9 | 43.5     | 43.6     | 44.6 | 44.6   | 44.6   | 45.3   | 45.7    | 46.0   |       |
| GE 2000               |                             |       | 34.4 | 34.4 | 34.4 | 37.0 | 40.2 | 40.2     | 42.4 | 46.0     | 46.4     | 47.1 | 47.1   | 47.1   | 47.8   | 48.2    | 48.6   |       |
| GE 1800               |                             |       | 34.4 | 34.4 | 34.4 | 37.0 | 40.2 | 40.2     | 42.4 | 46.0     | 46.4     | 47.1 | 47.1   | 47.1   | 47.8   | 48.2    | 48.6   |       |
| GE 1600               |                             |       | 34.4 | 34.4 | 34.4 | 37.0 | 40.2 | 40.2     | 42.4 | 46.0     | 46.4     | 47.1 | 47.1   | 47.1   | 47.8   | 48.2    | 48.6   |       |
| GE 1400               |                             |       | 34.4 | 34.4 | 34.4 | 37.0 | 40.2 | 40.2     | 42.4 | 46.0     | 46.4     | 47.1 | 47.1   | 47.1   | 47.8   | 48.2    | 48.6   |       |
| GE 1200               |                             |       | 34.4 | 34.4 | 34.4 | 37.0 | 40.2 | 40.2     | 42.4 | 46.0     | 46.4     | 47.1 | 47.1   | 47.1   | 47.8   | 48.2    | 48.6   |       |
| GE 1000               |                             |       | 44.9 | 44.9 | 44.9 | 49.6 | 54.0 | 54.0     | 56.9 | 63.0     | 63.4     | 64.1 | 64.1   | 64.5   | 65.6   | 65.9    | 66.3   |       |
| GE 900                |                             |       | 44.9 | 44.9 | 44.9 | 49.6 | 54.0 | 54.0     | 56.9 | 63.0     | 63.4     | 64.1 | 64.1   | 64.5   | 65.6   | 65.9    | 66.3   |       |
| GE 800                |                             |       | 44.9 | 44.9 | 44.9 | 49.6 | 54.0 | 54.0     | 56.9 | 63.0     | 63.4     | 64.1 | 64.1   | 64.5   | 65.6   | 65.9    | 66.3   |       |
| GE 700                |                             |       | 44.9 | 44.9 | 44.9 | 49.6 | 54.0 | 54.0     | 56.9 | 63.0     | 63.4     | 64.1 | 64.1   | 64.5   | 65.6   | 65.9    | 66.3   |       |
| GE 600                |                             |       | 45.3 | 45.3 | 45.3 | 52.0 | 54.3 | 54.3     | 57.2 | 63.4     | 63.5     | 64.5 | 64.5   | 64.5   | 64.9   | 65.9    | 66.3   | 66.7  |
| GE 500                |                             |       | 46.4 | 46.4 | 46.4 | 51.1 | 55.4 | 55.4     | 58.3 | 64.5     | 64.9     | 65.6 | 65.6   | 65.9   | 67.0   | 67.4    | 67.8   | 68.1  |
| GE 400                |                             |       | 46.7 | 46.7 | 46.7 | 51.4 | 55.8 | 55.8     | 58.7 | 64.9     | 65.2     | 65.9 | 65.9   | 66.3   | 67.4   | 67.8    | 68.1   |       |
| GE 300                |                             |       | 47.8 | 47.8 | 47.8 | 52.9 | 57.2 | 57.2     | 60.1 | 66.3     | 66.7     | 67.4 | 67.4   | 67.8   | 68.8   | 69.2    | 69.6   |       |
| GE 200                |                             |       | 47.8 | 47.8 | 47.8 | 53.6 | 58.0 | 58.0     | 60.9 | 67.0     | 67.4     | 68.1 | 68.1   | 68.5   | 69.6   | 69.9    | 70.3   |       |
| GE 100                |                             |       | 50.0 | 50.0 | 50.0 | 55.4 | 60.1 | 60.1     | 63.0 | 69.6     | 69.9     | 70.7 | 70.7   | 71.0   | 72.1   | 72.5    | 72.8   |       |
| GE 2000               |                             |       | 51.1 | 51.1 | 51.1 | 57.2 | 61.6 | 61.6     | 64.5 | 71.4     | 71.7     | 72.5 | 72.5   | 72.9   | 73.9   | 74.3    | 74.6   |       |
| GE 1800               |                             |       | 52.0 | 52.0 | 52.0 | 58.3 | 62.7 | 62.7     | 65.6 | 72.5     | 72.8     | 73.6 | 73.6   | 73.9   | 75.0   | 75.4    | 75.7   |       |
| GE 1600               |                             |       | 52.0 | 52.0 | 52.0 | 58.7 | 63.0 | 63.0     | 66.3 | 73.6     | 73.9     | 74.6 | 74.6   | 75.0   | 76.1   | 76.4    | 76.8   |       |
| GE 1400               |                             |       | 56.2 | 56.2 | 56.2 | 63.0 | 67.8 | 67.8     | 71.4 | 79.0     | 79.3     | 80.1 | 80.1   | 80.4   | 81.5   | 81.9    | 82.2   |       |
| GE 1200               |                             |       | 59.1 | 59.1 | 59.1 | 66.3 | 71.0 | 71.0     | 75.0 | 83.7     | 84.1     | 84.9 | 84.9   | 85.1   | 86.2   | 86.6    | 87.0   |       |
| GE 1000               |                             |       | 59.6 | 59.6 | 59.6 | 67.4 | 72.1 | 72.1     | 76.1 | 85.5     | 85.9     | 86.6 | 86.6   | 87.0   | 88.0   | 88.4    | 89.1   |       |
| GE 900                |                             |       | 59.6 | 59.6 | 59.6 | 68.5 | 73.2 | 73.2     | 77.5 | 87.3     | 87.7     | 88.4 | 88.4   | 88.8   | 89.9   | 90.2    | 90.9   |       |
| GE 800                |                             |       | 59.6 | 59.6 | 59.6 | 69.2 | 74.3 | 74.3     | 78.6 | 88.8     | 89.1     | 89.9 | 89.9   | 90.2   | 91.3   | 91.7    | 92.4   |       |
| GE 700                |                             |       | 59.6 | 59.6 | 59.6 | 69.2 | 74.3 | 74.3     | 78.6 | 89.5     | 89.9     | 90.6 | 90.6   | 90.9   | 92.0   | 92.4    | 93.1   |       |
| GE 600                |                             |       | 59.6 | 59.6 | 59.6 | 69.9 | 75.4 | 75.4     | 80.1 | 91.7     | 91.7     | 92.5 | 92.5   | 93.1   | 94.2   | 94.6    | 95.3   |       |
| GE 500                |                             |       | 62.0 | 62.0 | 62.0 | 69.9 | 75.4 | 75.4     | 80.6 | 92.0     | 92.4     | 93.5 | 93.5   | 93.8   | 94.9   | 95.3    | 96.0   |       |
| GE 400                |                             |       | 62.0 | 62.0 | 62.0 | 69.9 | 75.4 | 75.4     | 81.2 | 92.4     | 92.8     | 93.9 | 93.9   | 94.2   | 95.3   | 95.7    | 96.4   |       |
| GE 300                |                             |       | 62.0 | 62.0 | 62.0 | 69.9 | 75.4 | 75.4     | 81.2 | 92.8     | 93.2     | 94.9 | 94.9   | 95.3   | 95.7   | 97.1    | 97.5   |       |
| GE 200                |                             |       | 62.0 | 62.0 | 62.0 | 69.9 | 75.4 | 75.4     | 81.2 | 93.1     | 93.5     | 94.2 | 94.2   | 94.6   | 96.4   | 97.8    | 98.2   |       |
| GE 100                |                             |       | 62.0 | 62.0 | 62.0 | 69.9 | 75.4 | 75.4     | 81.2 | 93.1     | 93.5     | 94.2 | 94.2   | 94.6   | 96.4   | 97.8    | 98.2   |       |
| GE 0                  |                             |       | 50.3 | 50.3 | 50.3 | 70.3 | 75.7 | 75.7     | 81.5 | 93.5     | 94.6     | 96.4 | 96.4   | 96.7   | 97.1   | 98.9    | 99.3   | 100.0 |

TOTAL NUMBER OF OBSERVATIONS: 276

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MFC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 27991 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 76-87  
MONTH: FEB HOURS (LST): ALL

| CEILING<br>IN<br>FEET | 1 | GE<br>10 | GE<br>6 | GE<br>5 | GE<br>4 | GE<br>3 | GE<br>2 1/2 | VISIBILITY IN STATUTE MILES |             |             |         | GE<br>1 | GE<br>7/4 | GE<br>5/4 | GE<br>1/2 | GE<br>5/16 | GE<br>1/4 | GE<br>0 |
|-----------------------|---|----------|---------|---------|---------|---------|-------------|-----------------------------|-------------|-------------|---------|---------|-----------|-----------|-----------|------------|-----------|---------|
|                       |   |          |         |         |         |         |             | GE<br>2                     | GE<br>1 1/2 | GE<br>1 1/4 | GE<br>1 |         |           |           |           |            |           |         |
| NO CEIL               | 1 | 0        | 27.1    | 27.2    | 27.2    | 29.4    | 32.3        | 32.2                        | 33.7        | 36.2        | 37.8    | 38.4    | 38.8      | 39.1      | 39.5      | 39.7       | 40.6      |         |
| GE 20000              | 0 | 0        | 75.2    | 81.3    | 82.3    | 72.9    | 35.6        | 35.8                        | 37.4        | 40.2        | 41.6    | 42.3    | 42.7      | 43.0      | 43.4      | 43.7       | 44.6      |         |
| GE 18000              | 0 | 0        | 75.2    | 81.3    | 82.3    | 32.9    | 35.6        | 35.8                        | 37.4        | 40.2        | 41.6    | 42.3    | 42.7      | 43.0      | 43.4      | 43.7       | 44.6      |         |
| GE 16000              | 0 | 0        | 75.2    | 81.3    | 82.3    | 32.9    | 35.6        | 35.8                        | 37.4        | 40.2        | 41.6    | 42.3    | 42.7      | 43.0      | 43.4      | 43.7       | 44.6      |         |
| GE 14000              | 0 | 0        | 75.2    | 81.3    | 82.3    | 32.9    | 35.6        | 35.8                        | 37.4        | 40.2        | 41.6    | 42.3    | 42.7      | 43.0      | 43.4      | 43.7       | 44.6      |         |
| GE 12000              | 0 | 0        | 30.2    | 31.3    | 32.3    | 32.9    | 35.6        | 35.8                        | 37.4        | 40.2        | 41.6    | 42.3    | 42.7      | 43.0      | 43.4      | 43.7       | 44.6      |         |
| GE 10000              | 1 | 1        | 42.3    | 42.7    | 42.7    | 46.7    | 51.0        | 51.2                        | 53.7        | 59.0        | 60.9    | 61.7    | 62.3      | 62.7      | 63.4      | 63.7       | 64.7      |         |
| GE 9000               | 1 | 1        | 42.3    | 42.7    | 42.7    | 46.7    | 51.0        | 51.2                        | 53.7        | 59.0        | 60.9    | 61.7    | 62.3      | 62.7      | 63.4      | 63.7       | 64.7      |         |
| GE 8000               | 1 | 1        | 42.3    | 42.7    | 42.7    | 46.7    | 51.0        | 51.2                        | 53.7        | 59.0        | 60.9    | 61.7    | 62.3      | 62.7      | 63.4      | 63.7       | 64.7      |         |
| GE 7000               | 1 | 1        | 42.3    | 42.7    | 42.7    | 46.7    | 51.0        | 51.2                        | 53.7        | 59.0        | 60.9    | 61.7    | 62.3      | 62.7      | 63.4      | 63.7       | 64.7      |         |
| GE 6000               | 1 | 1        | 42.3    | 42.7    | 42.7    | 46.7    | 51.0        | 51.2                        | 53.7        | 59.0        | 60.9    | 61.7    | 62.3      | 62.7      | 63.4      | 63.7       | 64.7      |         |
| GE 5000               | 1 | 1        | 42.3    | 42.7    | 42.7    | 46.7    | 51.0        | 51.2                        | 53.7        | 59.0        | 60.9    | 61.7    | 62.3      | 62.7      | 63.4      | 63.7       | 64.7      |         |
| GE 4000               | 1 | 1        | 42.3    | 42.7    | 42.7    | 46.7    | 51.0        | 51.2                        | 53.7        | 59.0        | 60.9    | 61.7    | 62.3      | 62.7      | 63.4      | 63.7       | 64.7      |         |
| GE 3000               | 1 | 1        | 42.3    | 42.7    | 42.7    | 46.7    | 51.0        | 51.2                        | 53.7        | 59.0        | 60.9    | 61.7    | 62.3      | 62.7      | 63.4      | 63.7       | 64.7      |         |
| GE 2000               | 1 | 1        | 42.3    | 42.7    | 42.7    | 46.7    | 51.0        | 51.2                        | 53.7        | 59.0        | 60.9    | 61.7    | 62.3      | 62.7      | 63.4      | 63.7       | 64.7      |         |
| GE 1000               | 1 | 1        | 42.3    | 42.7    | 42.7    | 46.7    | 51.0        | 51.2                        | 53.7        | 59.0        | 60.9    | 61.7    | 62.3      | 62.7      | 63.4      | 63.7       | 64.7      |         |
| GE 0000               | 1 | 1        | 42.3    | 42.7    | 42.7    | 46.7    | 51.0        | 51.2                        | 53.7        | 59.0        | 60.9    | 61.7    | 62.3      | 62.7      | 63.4      | 63.7       | 64.7      |         |
| GE 20000              | 1 | 1        | 42.3    | 42.7    | 42.7    | 46.7    | 51.0        | 51.2                        | 53.7        | 59.0        | 60.9    | 61.7    | 62.3      | 62.7      | 63.4      | 63.7       | 64.7      |         |
| GE 18000              | 1 | 1        | 42.3    | 42.7    | 42.7    | 46.7    | 51.0        | 51.2                        | 53.7        | 59.0        | 60.9    | 61.7    | 62.3      | 62.7      | 63.4      | 63.7       | 64.7      |         |
| GE 16000              | 1 | 1        | 42.3    | 42.7    | 42.7    | 46.7    | 51.0        | 51.2                        | 53.7        | 59.0        | 60.9    | 61.7    | 62.3      | 62.7      | 63.4      | 63.7       | 64.7      |         |
| GE 14000              | 1 | 1        | 42.3    | 42.7    | 42.7    | 46.7    | 51.0        | 51.2                        | 53.7        | 59.0        | 60.9    | 61.7    | 62.3      | 62.7      | 63.4      | 63.7       | 64.7      |         |
| GE 12000              | 1 | 1        | 42.3    | 42.7    | 42.7    | 46.7    | 51.0        | 51.2                        | 53.7        | 59.0        | 60.9    | 61.7    | 62.3      | 62.7      | 63.4      | 63.7       | 64.7      |         |
| GE 10000              | 1 | 1        | 42.3    | 42.7    | 42.7    | 46.7    | 51.0        | 51.2                        | 53.7        | 59.0        | 60.9    | 61.7    | 62.3      | 62.7      | 63.4      | 63.7       | 64.7      |         |
| GE 9000               | 1 | 1        | 42.3    | 42.7    | 42.7    | 46.7    | 51.0        | 51.2                        | 53.7        | 59.0        | 60.9    | 61.7    | 62.3      | 62.7      | 63.4      | 63.7       | 64.7      |         |
| GE 8000               | 1 | 1        | 42.3    | 42.7    | 42.7    | 46.7    | 51.0        | 51.2                        | 53.7        | 59.0        | 60.9    | 61.7    | 62.3      | 62.7      | 63.4      | 63.7       | 64.7      |         |
| GE 7000               | 1 | 1        | 42.3    | 42.7    | 42.7    | 46.7    | 51.0        | 51.2                        | 53.7        | 59.0        | 60.9    | 61.7    | 62.3      | 62.7      | 63.4      | 63.7       | 64.7      |         |
| GE 6000               | 1 | 1        | 42.3    | 42.7    | 42.7    | 46.7    | 51.0        | 51.2                        | 53.7        | 59.0        | 60.9    | 61.7    | 62.3      | 62.7      | 63.4      | 63.7       | 64.7      |         |
| GE 5000               | 1 | 1        | 42.3    | 42.7    | 42.7    | 46.7    | 51.0        | 51.2                        | 53.7        | 59.0        | 60.9    | 61.7    | 62.3      | 62.7      | 63.4      | 63.7       | 64.7      |         |
| GE 4000               | 1 | 1        | 42.3    | 42.7    | 42.7    | 46.7    | 51.0        | 51.2                        | 53.7        | 59.0        | 60.9    | 61.7    | 62.3      | 62.7      | 63.4      | 63.7       | 64.7      |         |
| GE 3000               | 1 | 1        | 42.3    | 42.7    | 42.7    | 46.7    | 51.0        | 51.2                        | 53.7        | 59.0        | 60.9    | 61.7    | 62.3      | 62.7      | 63.4      | 63.7       | 64.7      |         |
| GE 2000               | 1 | 1        | 42.3    | 42.7    | 42.7    | 46.7    | 51.0        | 51.2                        | 53.7        | 59.0        | 60.9    | 61.7    | 62.3      | 62.7      | 63.4      | 63.7       | 64.7      |         |
| GE 1000               | 1 | 1        | 42.3    | 42.7    | 42.7    | 46.7    | 51.0        | 51.2                        | 53.7        | 59.0        | 60.9    | 61.7    | 62.3      | 62.7      | 63.4      | 63.7       | 64.7      |         |
| GE 0000               | 1 | 1        | 42.3    | 42.7    | 42.7    | 46.7    | 51.0        | 51.2                        | 53.7        | 59.0        | 60.9    | 61.7    | 62.3      | 62.7      | 63.4      | 63.7       | 64.7      |         |

TOTAL NUMBER OF OBSERVATIONS: 1164

GLOBAL CLIMATOLOGY BRANCH  
USAF/CLTAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275450 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: MAR HOURS(EST): 0000-0200

| CEILING<br>IN<br>FEET | VISIBILITY IN STATUTE MILES |      |      |      |      |      |      |      |      |      |       |       |       |       |       |       |       |       |
|-----------------------|-----------------------------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|
|                       | 1                           | GE 1 | GE 2 | GE 3 | GE 4 | GE 5 | GE 6 | GE 7 | GE 8 | GE 9 | GE 10 | GE 11 | GE 12 | GE 13 | GE 14 | GE 15 | GE 16 | GE 17 |
| NO CEIL               | 1                           | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     |
| GE 2000               | 1                           | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     |
| GE 1800               | 1                           | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     |
| GE 1600               | 1                           | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     |
| GE 1400               | 1                           | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     |
| GE 1200               | 1                           | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     |
| GE 1000               | 1                           | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     |
| GE 800                | 1                           | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     |
| GE 600                | 1                           | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     |
| GE 400                | 1                           | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     |
| GE 200                | 1                           | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     |
| GE 100                | 1                           | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     |
| GE 50                 | 1                           | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     |
| GE 25                 | 1                           | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     |
| GE 12                 | 1                           | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     |
| GE 6                  | 1                           | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     |
| GE 3                  | 1                           | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     |
| GE 1                  | 1                           | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     |
| GE 0                  | 1                           | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1     | 1     | 1     | 1     | 1     | 1     | 1     | 1     |

TOTAL NUMBER OF OBSERVATIONS: 773

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

PERIOD OF RECORD: 78-67  
MONTH: MAR HOURS(LST): 0300-0500

| CEILING  | VISIBILITY IN STATUTE MILES |      |       |      |      |      |      |      |          |          |      |        |        |        |         |        |      |  |
|----------|-----------------------------|------|-------|------|------|------|------|------|----------|----------|------|--------|--------|--------|---------|--------|------|--|
|          | IN FEET                     | GE 1 | GE 10 | GE 6 | GE 5 | GE 4 | GE 3 | GE 2 | GE 1 1/2 | GE 1 1/4 | GE 1 | GE 3/4 | GE 5/8 | GE 1/2 | GE 5/16 | GE 1/4 | GE 0 |  |
|          |                             |      |       |      |      |      |      |      |          |          |      |        |        |        |         |        |      |  |
| NO CEIL. | .7                          | 36.4 | 36.4  | 36.4 | 36.4 | 36.4 | 36.4 | 36.4 | 36.4     | 36.4     | 36.4 | 36.4   | 36.4   | 36.4   | 36.4    | 36.4   | 36.4 |  |
| GE 3000  | .3                          | 38.2 | 38.2  | 38.2 | 38.2 | 38.2 | 38.2 | 38.2 | 38.2     | 38.2     | 38.2 | 38.2   | 38.2   | 38.2   | 38.2    | 38.2   | 38.2 |  |
| GE 2800  | .3                          | 38.2 | 38.2  | 38.2 | 38.2 | 38.2 | 38.2 | 38.2 | 38.2     | 38.2     | 38.2 | 38.2   | 38.2   | 38.2   | 38.2    | 38.2   | 38.2 |  |
| GE 2600  | .3                          | 38.2 | 38.2  | 38.2 | 38.2 | 38.2 | 38.2 | 38.2 | 38.2     | 38.2     | 38.2 | 38.2   | 38.2   | 38.2   | 38.2    | 38.2   | 38.2 |  |
| GE 2400  | .3                          | 38.2 | 38.2  | 38.2 | 38.2 | 38.2 | 38.2 | 38.2 | 38.2     | 38.2     | 38.2 | 38.2   | 38.2   | 38.2   | 38.2    | 38.2   | 38.2 |  |
| GE 2200  | .3                          | 38.2 | 38.2  | 38.2 | 38.2 | 38.2 | 38.2 | 38.2 | 38.2     | 38.2     | 38.2 | 38.2   | 38.2   | 38.2   | 38.2    | 38.2   | 38.2 |  |
| GE 2000  | .3                          | 38.2 | 38.2  | 38.2 | 38.2 | 38.2 | 38.2 | 38.2 | 38.2     | 38.2     | 38.2 | 38.2   | 38.2   | 38.2   | 38.2    | 38.2   | 38.2 |  |
| GE 1800  | .3                          | 38.2 | 38.2  | 38.2 | 38.2 | 38.2 | 38.2 | 38.2 | 38.2     | 38.2     | 38.2 | 38.2   | 38.2   | 38.2   | 38.2    | 38.2   | 38.2 |  |
| GE 1600  | .3                          | 38.2 | 38.2  | 38.2 | 38.2 | 38.2 | 38.2 | 38.2 | 38.2     | 38.2     | 38.2 | 38.2   | 38.2   | 38.2   | 38.2    | 38.2   | 38.2 |  |
| GE 1400  | .3                          | 38.2 | 38.2  | 38.2 | 38.2 | 38.2 | 38.2 | 38.2 | 38.2     | 38.2     | 38.2 | 38.2   | 38.2   | 38.2   | 38.2    | 38.2   | 38.2 |  |
| GE 1200  | .3                          | 38.2 | 38.2  | 38.2 | 38.2 | 38.2 | 38.2 | 38.2 | 38.2     | 38.2     | 38.2 | 38.2   | 38.2   | 38.2   | 38.2    | 38.2   | 38.2 |  |
| GE 1000  | .3                          | 38.2 | 38.2  | 38.2 | 38.2 | 38.2 | 38.2 | 38.2 | 38.2     | 38.2     | 38.2 | 38.2   | 38.2   | 38.2   | 38.2    | 38.2   | 38.2 |  |
| GE 800   | .3                          | 38.2 | 38.2  | 38.2 | 38.2 | 38.2 | 38.2 | 38.2 | 38.2     | 38.2     | 38.2 | 38.2   | 38.2   | 38.2   | 38.2    | 38.2   | 38.2 |  |
| GE 600   | .3                          | 38.2 | 38.2  | 38.2 | 38.2 | 38.2 | 38.2 | 38.2 | 38.2     | 38.2     | 38.2 | 38.2   | 38.2   | 38.2   | 38.2    | 38.2   | 38.2 |  |
| GE 400   | .3                          | 38.2 | 38.2  | 38.2 | 38.2 | 38.2 | 38.2 | 38.2 | 38.2     | 38.2     | 38.2 | 38.2   | 38.2   | 38.2   | 38.2    | 38.2   | 38.2 |  |
| GE 200   | .3                          | 38.2 | 38.2  | 38.2 | 38.2 | 38.2 | 38.2 | 38.2 | 38.2     | 38.2     | 38.2 | 38.2   | 38.2   | 38.2   | 38.2    | 38.2   | 38.2 |  |
| GE 100   | .3                          | 38.2 | 38.2  | 38.2 | 38.2 | 38.2 | 38.2 | 38.2 | 38.2     | 38.2     | 38.2 | 38.2   | 38.2   | 38.2   | 38.2    | 38.2   | 38.2 |  |
| GE 50    | .3                          | 38.2 | 38.2  | 38.2 | 38.2 | 38.2 | 38.2 | 38.2 | 38.2     | 38.2     | 38.2 | 38.2   | 38.2   | 38.2   | 38.2    | 38.2   | 38.2 |  |
| GE 25    | .3                          | 38.2 | 38.2  | 38.2 | 38.2 | 38.2 | 38.2 | 38.2 | 38.2     | 38.2     | 38.2 | 38.2   | 38.2   | 38.2   | 38.2    | 38.2   | 38.2 |  |
| GE 12    | .3                          | 38.2 | 38.2  | 38.2 | 38.2 | 38.2 | 38.2 | 38.2 | 38.2     | 38.2     | 38.2 | 38.2   | 38.2   | 38.2   | 38.2    | 38.2   | 38.2 |  |
| GE 6     | .3                          | 38.2 | 38.2  | 38.2 | 38.2 | 38.2 | 38.2 | 38.2 | 38.2     | 38.2     | 38.2 | 38.2   | 38.2   | 38.2   | 38.2    | 38.2   | 38.2 |  |
| GE 3     | .3                          | 38.2 | 38.2  | 38.2 | 38.2 | 38.2 | 38.2 | 38.2 | 38.2     | 38.2     | 38.2 | 38.2   | 38.2   | 38.2   | 38.2    | 38.2   | 38.2 |  |
| GE 1     | .3                          | 38.2 | 38.2  | 38.2 | 38.2 | 38.2 | 38.2 | 38.2 | 38.2     | 38.2     | 38.2 | 38.2   | 38.2   | 38.2   | 38.2    | 38.2   | 38.2 |  |
| GE .5    | .3                          | 38.2 | 38.2  | 38.2 | 38.2 | 38.2 | 38.2 | 38.2 | 38.2     | 38.2     | 38.2 | 38.2   | 38.2   | 38.2   | 38.2    | 38.2   | 38.2 |  |

TOTAL NUMBER OF OBSERVATIONS: 201

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

PERIOD OF RECORD: 78-87  
MONTH: MAR HOURS(LST): 0600-0800

| CEILING  | VISIBILITY IN STATUTE MILES |      |      |      |       |      |       |      |      |      |      |      |      |      |      |      |
|----------|-----------------------------|------|------|------|-------|------|-------|------|------|------|------|------|------|------|------|------|
|          | 1/4                         | 1/2  | 3/4  | 1    | 1 1/2 | 2    | 2 1/2 | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   |
|          | FEET                        | 100  | 200  | 300  | 400   | 500  | 600   | 700  | 800  | 900  | 1000 | 1100 | 1200 | 1300 | 1400 | 1500 |
| NO CEIL  | 1                           | 25.4 | 25.4 | 25.4 | 25.4  | 29.8 | 29.8  | 31.1 | 36.8 | 37.8 | 38.4 | 39.5 | 40.1 | 40.5 | 40.8 | 43.5 |
| CE 20000 | 1                           | 26.4 | 26.4 | 26.4 | 26.4  | 31.8 | 31.8  | 33.1 | 39.8 | 41.1 | 41.8 | 42.8 | 43.5 | 43.8 | 44.1 | 46.8 |
| CE 18000 | 1                           | 26.4 | 26.4 | 26.4 | 26.4  | 31.8 | 31.8  | 33.1 | 39.8 | 41.1 | 41.8 | 42.8 | 43.5 | 43.8 | 44.1 | 46.8 |
| CE 16000 | 1                           | 26.4 | 26.4 | 26.4 | 26.4  | 31.8 | 31.8  | 33.1 | 39.8 | 41.1 | 41.8 | 42.8 | 43.5 | 43.8 | 44.1 | 46.8 |
| CE 14000 | 1                           | 26.4 | 26.4 | 26.4 | 26.4  | 31.8 | 31.8  | 33.1 | 39.8 | 41.1 | 41.8 | 42.8 | 43.5 | 43.8 | 44.1 | 46.8 |
| CE 12000 | 1                           | 26.4 | 26.4 | 26.4 | 26.4  | 31.8 | 31.8  | 33.1 | 39.8 | 41.1 | 41.8 | 42.8 | 43.5 | 43.8 | 44.1 | 46.8 |
| CE 10000 | 1                           | 39.1 | 39.5 | 39.5 | 40.4  | 47.2 | 47.2  | 49.8 | 58.5 | 60.9 | 60.9 | 63.5 | 64.2 | 64.5 | 64.9 | 67.9 |
| CE 9000  | 1                           | 39.1 | 39.5 | 39.5 | 40.4  | 47.2 | 47.2  | 49.8 | 58.5 | 60.9 | 60.9 | 63.5 | 64.2 | 64.5 | 64.9 | 67.9 |
| CE 8000  | 1                           | 39.1 | 39.5 | 39.5 | 40.4  | 47.2 | 47.2  | 49.8 | 58.5 | 60.9 | 60.9 | 63.5 | 64.2 | 64.5 | 64.9 | 67.9 |
| CE 7000  | 1                           | 39.5 | 39.8 | 39.8 | 41.1  | 47.5 | 47.5  | 50.2 | 58.9 | 61.2 | 61.2 | 63.9 | 64.5 | 64.9 | 65.2 | 68.2 |
| CE 6000  | 1                           | 39.8 | 40.1 | 40.1 | 41.5  | 47.8 | 47.8  | 50.5 | 59.2 | 61.5 | 61.5 | 64.2 | 64.9 | 65.2 | 65.6 | 68.6 |
| CE 5000  | 1                           | 40.8 | 41.1 | 41.1 | 42.5  | 48.8 | 48.8  | 51.5 | 60.2 | 62.5 | 62.5 | 65.2 | 65.9 | 66.2 | 66.6 | 69.6 |
| CE 4500  | 1                           | 41.1 | 41.5 | 41.5 | 42.8  | 49.2 | 49.2  | 51.8 | 60.5 | 62.9 | 62.9 | 65.6 | 66.2 | 66.6 | 66.9 | 69.9 |
| CE 4000  | 1                           | 42.8 | 43.1 | 43.1 | 44.5  | 50.8 | 50.8  | 53.5 | 62.2 | 64.5 | 64.5 | 67.2 | 67.9 | 68.2 | 68.6 | 71.6 |
| CE 3500  | 1                           | 42.8 | 43.1 | 43.1 | 44.5  | 51.2 | 51.2  | 53.8 | 62.5 | 64.9 | 64.9 | 67.6 | 68.2 | 68.6 | 68.9 | 71.9 |
| CE 3000  | 1                           | 43.5 | 43.8 | 43.8 | 45.1  | 52.5 | 52.5  | 55.2 | 63.9 | 66.2 | 66.2 | 68.9 | 69.6 | 70.2 | 70.6 | 73.9 |
| CE 2500  | 1                           | 44.8 | 45.2 | 45.2 | 46.8  | 53.5 | 53.5  | 56.2 | 65.2 | 67.5 | 67.5 | 70.2 | 70.9 | 71.6 | 71.9 | 75.3 |
| CE 2000  | 1                           | 45.2 | 45.6 | 45.6 | 47.2  | 54.8 | 54.8  | 57.5 | 66.8 | 69.9 | 69.9 | 72.6 | 73.2 | 73.6 | 73.9 | 76.9 |
| CE 1800  | 1                           | 46.2 | 46.5 | 46.5 | 48.5  | 55.5 | 55.5  | 58.2 | 67.2 | 69.6 | 69.6 | 72.6 | 73.2 | 73.9 | 74.2 | 77.6 |
| CE 1600  | 1                           | 47.8 | 48.2 | 48.2 | 50.2  | 57.5 | 57.5  | 60.2 | 69.2 | 71.6 | 71.6 | 74.6 | 75.3 | 75.9 | 76.3 | 79.6 |
| CE 1400  | 1                           | 49.5 | 49.8 | 49.8 | 52.2  | 60.2 | 60.2  | 62.9 | 72.2 | 74.5 | 74.5 | 77.9 | 78.6 | 79.3 | 79.6 | 82.9 |
| CE 1200  | 1                           | 51.8 | 51.2 | 51.2 | 53.5  | 61.9 | 62.2  | 65.2 | 75.3 | 77.9 | 77.9 | 80.9 | 81.6 | 82.3 | 82.6 | 86.0 |
| CE 1000  | 1                           | 51.8 | 51.2 | 51.2 | 53.5  | 61.9 | 62.2  | 65.2 | 75.3 | 77.9 | 77.9 | 80.9 | 81.6 | 82.3 | 82.6 | 86.0 |
| CE 900   | 1                           | 51.2 | 51.5 | 51.5 | 54.2  | 62.9 | 63.2  | 66.2 | 76.3 | 78.9 | 78.9 | 81.9 | 82.6 | 83.3 | 83.6 | 87.0 |
| CE 800   | 1                           | 51.2 | 51.5 | 51.5 | 54.2  | 62.9 | 63.2  | 66.2 | 76.3 | 78.9 | 78.9 | 81.9 | 82.6 | 83.3 | 83.6 | 87.0 |
| CE 700   | 1                           | 51.8 | 51.8 | 51.8 | 54.8  | 63.5 | 63.8  | 67.2 | 77.6 | 80.9 | 80.9 | 83.9 | 84.6 | 85.3 | 85.6 | 89.6 |
| CE 600   | 1                           | 51.8 | 51.8 | 51.8 | 54.8  | 63.5 | 63.8  | 67.2 | 77.6 | 80.9 | 80.9 | 83.9 | 84.6 | 85.3 | 85.6 | 89.6 |
| CE 500   | 1                           | 51.8 | 51.8 | 51.8 | 54.8  | 63.5 | 63.8  | 67.2 | 77.6 | 80.9 | 80.9 | 83.9 | 84.6 | 85.3 | 85.6 | 89.6 |
| CE 400   | 1                           | 51.8 | 51.8 | 51.8 | 54.8  | 63.5 | 63.8  | 67.2 | 77.6 | 80.9 | 80.9 | 83.9 | 84.6 | 85.3 | 85.6 | 89.6 |
| CE 300   | 1                           | 51.8 | 51.8 | 51.8 | 54.8  | 63.5 | 63.8  | 67.2 | 77.6 | 80.9 | 80.9 | 83.9 | 84.6 | 85.3 | 85.6 | 89.6 |
| CE 200   | 1                           | 51.8 | 51.8 | 51.8 | 54.8  | 63.5 | 63.8  | 67.2 | 77.6 | 80.9 | 80.9 | 83.9 | 84.6 | 85.3 | 85.6 | 89.6 |
| CE 100   | 1                           | 51.8 | 51.8 | 51.8 | 54.8  | 63.5 | 63.8  | 67.2 | 77.6 | 80.9 | 80.9 | 83.9 | 84.6 | 85.3 | 85.6 | 89.6 |

TOTAL NUMBER OF OBSERVATIONS: 299

GLOBAL CLIMATOLOGY BRANCH  
USAF/ETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275011 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: MAR HOURS(UTC): 0900-1100

| CEILING<br>IN<br>FEET | VISIBILITY IN STATUTE MILES |         |         |         |         |             |         |             |             |         |           |           |           |            |           |         |
|-----------------------|-----------------------------|---------|---------|---------|---------|-------------|---------|-------------|-------------|---------|-----------|-----------|-----------|------------|-----------|---------|
|                       | GE<br>10                    | GE<br>6 | GE<br>5 | GE<br>4 | GE<br>3 | GE<br>2 1/2 | GE<br>2 | GE<br>1 1/2 | GE<br>1 1/4 | GE<br>1 | GE<br>3/4 | GE<br>5/8 | GE<br>1/2 | GE<br>5/16 | GE<br>1/4 | GE<br>0 |
| NO CEILING            | 29.2                        | 29.7    | 29.7    | 32.6    | 36.6    | 36.6        | 36.6    | 37.4        | 41.7        | 43.2    | 47.6      | 44.0      | 44.3      | 44.3       | 44.3      | 44.7    |
| GE 10000              | 32.0                        | 33.7    | 33.0    | 35.9    | 40.3    | 40.3        | 40.3    | 41.8        | 45.1        | 45.0    | 48.4      | 49.1      | 49.5      | 49.5       | 49.5      | 49.8    |
| GE 16000              | 32.0                        | 33.0    | 33.0    | 35.9    | 40.3    | 40.3        | 40.3    | 41.8        | 45.1        | 48.0    | 48.4      | 49.1      | 49.5      | 49.5       | 49.5      | 49.8    |
| GE 16000              | 32.0                        | 33.0    | 33.0    | 35.9    | 40.3    | 40.3        | 40.3    | 41.8        | 45.1        | 48.0    | 48.4      | 49.1      | 49.5      | 49.5       | 49.5      | 49.8    |
| GE 14000              | 32.0                        | 33.0    | 33.0    | 35.9    | 40.3    | 40.3        | 40.3    | 41.8        | 45.1        | 48.0    | 48.4      | 49.1      | 49.5      | 49.5       | 49.5      | 49.8    |
| GE 12000              | 32.0                        | 33.0    | 33.0    | 35.9    | 40.3    | 40.3        | 40.3    | 41.8        | 45.1        | 48.0    | 48.4      | 49.1      | 49.5      | 49.5       | 49.5      | 49.8    |
| GE 10000              | 45.1                        | 46.2    | 46.2    | 52.0    | 59.0    | 59.0        | 59.0    | 63.0        | 67.4        | 71.1    | 72.2      | 73.3      | 74.0      | 74.7       | 74.7      | 75.1    |
| GE 9000               | 45.1                        | 46.2    | 46.2    | 52.0    | 59.0    | 59.0        | 59.0    | 63.0        | 67.4        | 71.1    | 72.2      | 73.3      | 74.0      | 74.7       | 74.7      | 75.1    |
| GE 8000               | 45.1                        | 46.2    | 46.2    | 52.0    | 59.0    | 59.0        | 59.0    | 63.0        | 67.4        | 71.1    | 72.2      | 73.3      | 74.0      | 74.7       | 74.7      | 75.1    |
| GE 7000               | 45.1                        | 46.2    | 46.2    | 52.0    | 59.0    | 59.0        | 59.0    | 63.0        | 67.4        | 71.1    | 72.2      | 73.3      | 74.0      | 74.7       | 74.7      | 75.1    |
| GE 6000               | 45.1                        | 46.2    | 46.2    | 52.0    | 59.0    | 59.0        | 59.0    | 63.0        | 67.4        | 71.1    | 72.2      | 73.3      | 74.0      | 74.7       | 74.7      | 75.1    |
| GE 5000               | 45.1                        | 46.2    | 46.2    | 52.0    | 59.0    | 59.0        | 59.0    | 63.0        | 67.4        | 71.1    | 72.2      | 73.3      | 74.0      | 74.7       | 74.7      | 75.1    |
| GE 4500               | 45.1                        | 46.2    | 46.2    | 52.0    | 59.0    | 59.0        | 59.0    | 63.0        | 67.4        | 71.1    | 72.2      | 73.3      | 74.0      | 74.7       | 74.7      | 75.1    |
| GE 4000               | 45.1                        | 46.2    | 46.2    | 52.0    | 59.0    | 59.0        | 59.0    | 63.0        | 67.4        | 71.1    | 72.2      | 73.3      | 74.0      | 74.7       | 74.7      | 75.1    |
| GE 3500               | 45.1                        | 46.2    | 46.2    | 52.0    | 59.0    | 59.0        | 59.0    | 63.0        | 67.4        | 71.1    | 72.2      | 73.3      | 74.0      | 74.7       | 74.7      | 75.1    |
| GE 3000               | 45.1                        | 46.2    | 46.2    | 52.0    | 59.0    | 59.0        | 59.0    | 63.0        | 67.4        | 71.1    | 72.2      | 73.3      | 74.0      | 74.7       | 74.7      | 75.1    |
| GE 2500               | 45.1                        | 46.2    | 46.2    | 52.0    | 59.0    | 59.0        | 59.0    | 63.0        | 67.4        | 71.1    | 72.2      | 73.3      | 74.0      | 74.7       | 74.7      | 75.1    |
| GE 2000               | 45.1                        | 46.2    | 46.2    | 52.0    | 59.0    | 59.0        | 59.0    | 63.0        | 67.4        | 71.1    | 72.2      | 73.3      | 74.0      | 74.7       | 74.7      | 75.1    |
| GE 1800               | 45.1                        | 46.2    | 46.2    | 52.0    | 59.0    | 59.0        | 59.0    | 63.0        | 67.4        | 71.1    | 72.2      | 73.3      | 74.0      | 74.7       | 74.7      | 75.1    |
| GE 1600               | 45.1                        | 46.2    | 46.2    | 52.0    | 59.0    | 59.0        | 59.0    | 63.0        | 67.4        | 71.1    | 72.2      | 73.3      | 74.0      | 74.7       | 74.7      | 75.1    |
| GE 1400               | 45.1                        | 46.2    | 46.2    | 52.0    | 59.0    | 59.0        | 59.0    | 63.0        | 67.4        | 71.1    | 72.2      | 73.3      | 74.0      | 74.7       | 74.7      | 75.1    |
| GE 1200               | 45.1                        | 46.2    | 46.2    | 52.0    | 59.0    | 59.0        | 59.0    | 63.0        | 67.4        | 71.1    | 72.2      | 73.3      | 74.0      | 74.7       | 74.7      | 75.1    |
| GE 1000               | 45.1                        | 46.2    | 46.2    | 52.0    | 59.0    | 59.0        | 59.0    | 63.0        | 67.4        | 71.1    | 72.2      | 73.3      | 74.0      | 74.7       | 74.7      | 75.1    |
| GE 900                | 45.1                        | 46.2    | 46.2    | 52.0    | 59.0    | 59.0        | 59.0    | 63.0        | 67.4        | 71.1    | 72.2      | 73.3      | 74.0      | 74.7       | 74.7      | 75.1    |
| GE 800                | 45.1                        | 46.2    | 46.2    | 52.0    | 59.0    | 59.0        | 59.0    | 63.0        | 67.4        | 71.1    | 72.2      | 73.3      | 74.0      | 74.7       | 74.7      | 75.1    |
| GE 700                | 45.1                        | 46.2    | 46.2    | 52.0    | 59.0    | 59.0        | 59.0    | 63.0        | 67.4        | 71.1    | 72.2      | 73.3      | 74.0      | 74.7       | 74.7      | 75.1    |
| GE 600                | 45.1                        | 46.2    | 46.2    | 52.0    | 59.0    | 59.0        | 59.0    | 63.0        | 67.4        | 71.1    | 72.2      | 73.3      | 74.0      | 74.7       | 74.7      | 75.1    |
| GE 500                | 45.1                        | 46.2    | 46.2    | 52.0    | 59.0    | 59.0        | 59.0    | 63.0        | 67.4        | 71.1    | 72.2      | 73.3      | 74.0      | 74.7       | 74.7      | 75.1    |
| GE 400                | 45.1                        | 46.2    | 46.2    | 52.0    | 59.0    | 59.0        | 59.0    | 63.0        | 67.4        | 71.1    | 72.2      | 73.3      | 74.0      | 74.7       | 74.7      | 75.1    |
| GE 300                | 45.1                        | 46.2    | 46.2    | 52.0    | 59.0    | 59.0        | 59.0    | 63.0        | 67.4        | 71.1    | 72.2      | 73.3      | 74.0      | 74.7       | 74.7      | 75.1    |
| GE 200                | 45.1                        | 46.2    | 46.2    | 52.0    | 59.0    | 59.0        | 59.0    | 63.0        | 67.4        | 71.1    | 72.2      | 73.3      | 74.0      | 74.7       | 74.7      | 75.1    |
| GE 100                | 45.1                        | 46.2    | 46.2    | 52.0    | 59.0    | 59.0        | 59.0    | 63.0        | 67.4        | 71.1    | 72.2      | 73.3      | 74.0      | 74.7       | 74.7      | 75.1    |
| GE 0                  | 45.1                        | 46.2    | 46.2    | 52.0    | 59.0    | 59.0        | 59.0    | 63.0        | 67.4        | 71.1    | 72.2      | 73.3      | 74.0      | 74.7       | 74.7      | 75.1    |

TOTAL NUMBER OF OBSERVATIONS: 773

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

PERIOD OF RECORD: 78-87  
MONTH: MAR HOURS(LST): 1200-1400

[illegible]

TOTAL NUMBER OF OBSERVATIONS: 297

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM FOURLY OBSERVATIONS

STATION NUMBER: 275957 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 74-87

MONTH: MAR

HOURS (LST): 15.00-17.00

| CEILING    | VISIBILITY IN STATUTE MILES |      |      |      |      |      |          |      |          |          |      |        |        |        |         |        |      |
|------------|-----------------------------|------|------|------|------|------|----------|------|----------|----------|------|--------|--------|--------|---------|--------|------|
|            | IN FEET                     | GE 1 | GE 2 | GE 3 | GE 4 | GE 5 | GE 2 1/2 | GE 2 | GE 1 1/2 | GE 1 1/4 | GE 1 | GE 3/4 | GE 5/8 | GE 1/2 | GE 5/16 | GE 1/4 | GE 0 |
| NO CEILING |                             | 40.7 | 40.7 | 40.7 | 40.7 | 40.7 | 40.7     | 40.7 | 40.7     | 40.7     | 40.7 | 40.7   | 40.7   | 40.7   | 40.7    | 40.7   | 40.7 |
| GE 20000   |                             | 40.7 | 40.7 | 40.7 | 40.7 | 40.7 | 40.7     | 40.7 | 40.7     | 40.7     | 40.7 | 40.7   | 40.7   | 40.7   | 40.7    | 40.7   | 40.7 |
| GE 18000   |                             | 40.7 | 40.7 | 40.7 | 40.7 | 40.7 | 40.7     | 40.7 | 40.7     | 40.7     | 40.7 | 40.7   | 40.7   | 40.7   | 40.7    | 40.7   | 40.7 |
| GE 16000   |                             | 40.7 | 40.7 | 40.7 | 40.7 | 40.7 | 40.7     | 40.7 | 40.7     | 40.7     | 40.7 | 40.7   | 40.7   | 40.7   | 40.7    | 40.7   | 40.7 |
| GE 14000   |                             | 40.7 | 40.7 | 40.7 | 40.7 | 40.7 | 40.7     | 40.7 | 40.7     | 40.7     | 40.7 | 40.7   | 40.7   | 40.7   | 40.7    | 40.7   | 40.7 |
| GE 12000   |                             | 40.7 | 40.7 | 40.7 | 40.7 | 40.7 | 40.7     | 40.7 | 40.7     | 40.7     | 40.7 | 40.7   | 40.7   | 40.7   | 40.7    | 40.7   | 40.7 |
| GE 10000   |                             | 64.3 | 64.7 | 64.7 | 67.3 | 70.7 | 70.7     | 71.7 | 73.7     | 74.0     | 74.0 | 74.0   | 74.0   | 74.0   | 74.0    | 74.0   | 74.0 |
| GE 9000    |                             | 64.3 | 64.7 | 64.7 | 67.3 | 70.7 | 70.7     | 71.7 | 73.7     | 74.0     | 74.0 | 74.0   | 74.0   | 74.0   | 74.0    | 74.0   | 74.0 |
| GE 8000    |                             | 64.3 | 64.7 | 64.7 | 67.3 | 70.7 | 70.7     | 71.7 | 73.7     | 74.0     | 74.0 | 74.0   | 74.0   | 74.0   | 74.0    | 74.0   | 74.0 |
| GE 7000    |                             | 64.3 | 64.7 | 64.7 | 67.3 | 70.7 | 70.7     | 71.7 | 73.7     | 74.0     | 74.0 | 74.0   | 74.0   | 74.0   | 74.0    | 74.0   | 74.0 |
| GE 6000    |                             | 64.3 | 64.7 | 64.7 | 67.3 | 70.7 | 70.7     | 71.7 | 73.7     | 74.0     | 74.0 | 74.0   | 74.0   | 74.0   | 74.0    | 74.0   | 74.0 |
| GE 5000    |                             | 65.0 | 65.0 | 65.3 | 68.0 | 71.3 | 71.3     | 72.3 | 74.3     | 74.7     | 74.7 | 74.7   | 74.7   | 74.7   | 74.7    | 74.7   | 74.7 |
| GE 4000    |                             | 65.0 | 65.0 | 65.3 | 68.0 | 71.3 | 71.3     | 72.3 | 74.3     | 74.7     | 74.7 | 74.7   | 74.7   | 74.7   | 74.7    | 74.7   | 74.7 |
| GE 3000    |                             | 67.3 | 67.7 | 67.7 | 70.7 | 74.0 | 74.0     | 75.0 | 77.0     | 77.3     | 77.3 | 77.3   | 77.3   | 77.3   | 77.3    | 77.3   | 77.3 |
| GE 2000    |                             | 67.3 | 67.7 | 67.7 | 70.7 | 74.0 | 74.0     | 75.0 | 77.0     | 77.3     | 77.3 | 77.3   | 77.3   | 77.3   | 77.3    | 77.3   | 77.3 |
| GE 1000    |                             | 70.3 | 70.7 | 70.7 | 73.7 | 77.0 | 77.0     | 78.0 | 80.0     | 80.3     | 80.3 | 80.3   | 80.3   | 80.3   | 80.3    | 80.3   | 80.3 |
| GE 2500    |                             | 71.7 | 72.0 | 72.0 | 75.7 | 79.7 | 79.7     | 81.7 | 82.0     | 82.0     | 82.0 | 82.0   | 82.0   | 82.0   | 82.0    | 82.0   | 82.0 |
| GE 2000    |                             | 74.0 | 74.3 | 74.3 | 77.7 | 81.0 | 81.0     | 82.0 | 84.0     | 84.3     | 84.3 | 84.3   | 84.3   | 84.3   | 84.3    | 84.3   | 84.3 |
| GE 1800    |                             | 74.7 | 75.0 | 75.0 | 78.3 | 81.7 | 81.7     | 82.7 | 84.7     | 85.0     | 85.0 | 85.0   | 85.0   | 85.0   | 85.0    | 85.0   | 85.0 |
| GE 1600    |                             | 75.0 | 75.3 | 75.3 | 79.7 | 83.0 | 83.0     | 84.0 | 86.7     | 87.0     | 87.0 | 87.0   | 87.0   | 87.0   | 87.0    | 87.0   | 87.0 |
| GE 1400    |                             | 76.3 | 77.3 | 77.3 | 80.7 | 84.7 | 84.7     | 85.7 | 88.7     | 89.0     | 89.0 | 89.0   | 89.0   | 89.0   | 89.0    | 89.0   | 89.0 |
| GE 1200    | .2                          | 70.7 | 70.7 | 70.7 | 80.3 | 87.7 | 87.7     | 89.0 | 92.7     | 92.0     | 92.0 | 92.0   | 92.0   | 92.0   | 92.0    | 92.0   | 92.0 |
| GE 1000    | .3                          | 70.7 | 70.7 | 70.7 | 80.3 | 87.7 | 87.7     | 89.0 | 92.7     | 92.0     | 92.0 | 92.0   | 92.0   | 92.0   | 92.0    | 92.0   | 92.0 |
| GE 800     | .3                          | 70.7 | 70.7 | 70.7 | 80.3 | 87.7 | 87.7     | 89.0 | 92.7     | 92.0     | 92.0 | 92.0   | 92.0   | 92.0   | 92.0    | 92.0   | 92.0 |
| GE 700     | .3                          | 70.7 | 70.7 | 70.7 | 80.3 | 87.7 | 87.7     | 89.0 | 92.7     | 92.0     | 92.0 | 92.0   | 92.0   | 92.0   | 92.0    | 92.0   | 92.0 |
| GE 600     | .3                          | 70.7 | 70.7 | 70.7 | 80.3 | 87.7 | 87.7     | 89.0 | 92.7     | 92.0     | 92.0 | 92.0   | 92.0   | 92.0   | 92.0    | 92.0   | 92.0 |
| GE 500     | .3                          | 70.7 | 70.7 | 70.7 | 80.3 | 87.7 | 87.7     | 89.0 | 92.7     | 92.0     | 92.0 | 92.0   | 92.0   | 92.0   | 92.0    | 92.0   | 92.0 |
| GE 400     | .3                          | 70.7 | 70.7 | 70.7 | 80.3 | 87.7 | 87.7     | 89.0 | 92.7     | 92.0     | 92.0 | 92.0   | 92.0   | 92.0   | 92.0    | 92.0   | 92.0 |
| GE 300     | .3                          | 70.7 | 70.7 | 70.7 | 80.3 | 87.7 | 87.7     | 89.0 | 92.7     | 92.0     | 92.0 | 92.0   | 92.0   | 92.0   | 92.0    | 92.0   | 92.0 |
| GE 200     | .3                          | 70.7 | 70.7 | 70.7 | 80.3 | 87.7 | 87.7     | 89.0 | 92.7     | 92.0     | 92.0 | 92.0   | 92.0   | 92.0   | 92.0    | 92.0   | 92.0 |
| GE 100     | .3                          | 70.7 | 70.7 | 70.7 | 80.3 | 87.7 | 87.7     | 89.0 | 92.7     | 92.0     | 92.0 | 92.0   | 92.0   | 92.0   | 92.0    | 92.0   | 92.0 |

TOTAL NUMBER OF OBSERVATIONS: 321

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

PERIOD OF RECORD: 74-87  
MONTH: MAY HOURS (LST): 1900-2300

[illegible]

TOTAL NUMBER OF OBSERVATIONS: 229

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275657 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: MAR HOURS(LST): 2100-2300

| CEILING<br>IN<br>FEET | VISIBILITY IN STATUTE MILES |         |         |         |         |             |         |           |             |         |           |           |           |            |           |         |
|-----------------------|-----------------------------|---------|---------|---------|---------|-------------|---------|-----------|-------------|---------|-----------|-----------|-----------|------------|-----------|---------|
|                       | GE<br>10                    | GE<br>5 | GE<br>4 | GE<br>3 | GE<br>2 | GE<br>1 1/2 | GE<br>1 | GE<br>3/4 | GE<br>1 1/4 | GE<br>1 | GE<br>3/4 | GE<br>5/8 | GE<br>1/2 | GE<br>5/16 | GE<br>1/4 | GE<br>0 |
| NO CEIL               | 45.2                        | 47.2    | 45.2    | 46.5    | 48.2    | 48.2        | 49.8    | 49.8      | 49.8        | 49.8    | 49.8      | 49.8      | 49.8      | 49.8       | 49.8      | 50.5    |
| GE 2000               | 47.2                        | 47.2    | 47.2    | 48.5    | 50.2    | 50.2        | 50.8    | 52.2      | 52.2        | 52.2    | 52.2      | 52.2      | 52.2      | 52.2       | 52.2      | 52.8    |
| GE 1500               | 47.2                        | 47.2    | 47.2    | 48.5    | 50.2    | 50.2        | 50.8    | 52.2      | 52.2        | 52.2    | 52.2      | 52.2      | 52.2      | 52.2       | 52.2      | 52.8    |
| GE 1000               | 47.2                        | 47.2    | 47.2    | 48.5    | 50.2    | 50.2        | 50.8    | 52.2      | 52.2        | 52.2    | 52.2      | 52.2      | 52.2      | 52.2       | 52.2      | 52.8    |
| GE 800                | 47.2                        | 47.2    | 47.2    | 48.5    | 50.2    | 50.2        | 50.8    | 52.2      | 52.2        | 52.2    | 52.2      | 52.2      | 52.2      | 52.2       | 52.2      | 52.8    |
| GE 600                | 63.1                        | 63.1    | 63.1    | 64.8    | 67.8    | 67.8        | 68.4    | 70.8      | 70.8        | 70.8    | 70.8      | 70.8      | 70.8      | 70.8       | 70.8      | 71.4    |
| GE 400                | 63.1                        | 63.1    | 63.1    | 64.8    | 67.8    | 67.8        | 68.4    | 70.8      | 70.8        | 70.8    | 70.8      | 70.8      | 70.8      | 70.8       | 70.8      | 71.4    |
| GE 200                | 63.1                        | 63.1    | 63.1    | 64.8    | 67.8    | 67.8        | 68.4    | 70.8      | 70.8        | 70.8    | 70.8      | 70.8      | 70.8      | 70.8       | 70.8      | 71.4    |
| GE 100                | 63.1                        | 63.1    | 63.1    | 64.8    | 67.8    | 67.8        | 68.4    | 70.8      | 70.8        | 70.8    | 70.8      | 70.8      | 70.8      | 70.8       | 70.8      | 71.4    |
| GE 50                 | 63.1                        | 63.1    | 63.1    | 64.8    | 67.8    | 67.8        | 68.4    | 70.8      | 70.8        | 70.8    | 70.8      | 70.8      | 70.8      | 70.8       | 70.8      | 71.4    |
| GE 25                 | 63.1                        | 63.1    | 63.1    | 64.8    | 67.8    | 67.8        | 68.4    | 70.8      | 70.8        | 70.8    | 70.8      | 70.8      | 70.8      | 70.8       | 70.8      | 71.4    |
| GE 15                 | 63.1                        | 63.1    | 63.1    | 64.8    | 67.8    | 67.8        | 68.4    | 70.8      | 70.8        | 70.8    | 70.8      | 70.8      | 70.8      | 70.8       | 70.8      | 71.4    |
| GE 10                 | 63.1                        | 63.1    | 63.1    | 64.8    | 67.8    | 67.8        | 68.4    | 70.8      | 70.8        | 70.8    | 70.8      | 70.8      | 70.8      | 70.8       | 70.8      | 71.4    |
| GE 5                  | 63.1                        | 63.1    | 63.1    | 64.8    | 67.8    | 67.8        | 68.4    | 70.8      | 70.8        | 70.8    | 70.8      | 70.8      | 70.8      | 70.8       | 70.8      | 71.4    |
| GE 2                  | 63.1                        | 63.1    | 63.1    | 64.8    | 67.8    | 67.8        | 68.4    | 70.8      | 70.8        | 70.8    | 70.8      | 70.8      | 70.8      | 70.8       | 70.8      | 71.4    |
| GE 1                  | 63.1                        | 63.1    | 63.1    | 64.8    | 67.8    | 67.8        | 68.4    | 70.8      | 70.8        | 70.8    | 70.8      | 70.8      | 70.8      | 70.8       | 70.8      | 71.4    |
| GE 0                  | 63.1                        | 63.1    | 63.1    | 64.8    | 67.8    | 67.8        | 68.4    | 70.8      | 70.8        | 70.8    | 70.8      | 70.8      | 70.8      | 70.8       | 70.8      | 71.4    |
| GE 2500               | 73.1                        | 73.1    | 73.1    | 74.8    | 77.8    | 77.8        | 78.4    | 80.8      | 80.8        | 80.8    | 80.8      | 80.8      | 80.8      | 80.8       | 80.8      | 81.4    |
| GE 2000               | 73.1                        | 73.1    | 73.1    | 74.8    | 77.8    | 77.8        | 78.4    | 80.8      | 80.8        | 80.8    | 80.8      | 80.8      | 80.8      | 80.8       | 80.8      | 81.4    |
| GE 1500               | 73.1                        | 73.1    | 73.1    | 74.8    | 77.8    | 77.8        | 78.4    | 80.8      | 80.8        | 80.8    | 80.8      | 80.8      | 80.8      | 80.8       | 80.8      | 81.4    |
| GE 1000               | 73.1                        | 73.1    | 73.1    | 74.8    | 77.8    | 77.8        | 78.4    | 80.8      | 80.8        | 80.8    | 80.8      | 80.8      | 80.8      | 80.8       | 80.8      | 81.4    |
| GE 800                | 73.1                        | 73.1    | 73.1    | 74.8    | 77.8    | 77.8        | 78.4    | 80.8      | 80.8        | 80.8    | 80.8      | 80.8      | 80.8      | 80.8       | 80.8      | 81.4    |
| GE 600                | 73.1                        | 73.1    | 73.1    | 74.8    | 77.8    | 77.8        | 78.4    | 80.8      | 80.8        | 80.8    | 80.8      | 80.8      | 80.8      | 80.8       | 80.8      | 81.4    |
| GE 400                | 73.1                        | 73.1    | 73.1    | 74.8    | 77.8    | 77.8        | 78.4    | 80.8      | 80.8        | 80.8    | 80.8      | 80.8      | 80.8      | 80.8       | 80.8      | 81.4    |
| GE 200                | 73.1                        | 73.1    | 73.1    | 74.8    | 77.8    | 77.8        | 78.4    | 80.8      | 80.8        | 80.8    | 80.8      | 80.8      | 80.8      | 80.8       | 80.8      | 81.4    |
| GE 100                | 73.1                        | 73.1    | 73.1    | 74.8    | 77.8    | 77.8        | 78.4    | 80.8      | 80.8        | 80.8    | 80.8      | 80.8      | 80.8      | 80.8       | 80.8      | 81.4    |
| GE 50                 | 73.1                        | 73.1    | 73.1    | 74.8    | 77.8    | 77.8        | 78.4    | 80.8      | 80.8        | 80.8    | 80.8      | 80.8      | 80.8      | 80.8       | 80.8      | 81.4    |
| GE 25                 | 73.1                        | 73.1    | 73.1    | 74.8    | 77.8    | 77.8        | 78.4    | 80.8      | 80.8        | 80.8    | 80.8      | 80.8      | 80.8      | 80.8       | 80.8      | 81.4    |
| GE 15                 | 73.1                        | 73.1    | 73.1    | 74.8    | 77.8    | 77.8        | 78.4    | 80.8      | 80.8        | 80.8    | 80.8      | 80.8      | 80.8      | 80.8       | 80.8      | 81.4    |
| GE 10                 | 73.1                        | 73.1    | 73.1    | 74.8    | 77.8    | 77.8        | 78.4    | 80.8      | 80.8        | 80.8    | 80.8      | 80.8      | 80.8      | 80.8       | 80.8      | 81.4    |
| GE 5                  | 73.1                        | 73.1    | 73.1    | 74.8    | 77.8    | 77.8        | 78.4    | 80.8      | 80.8        | 80.8    | 80.8      | 80.8      | 80.8      | 80.8       | 80.8      | 81.4    |
| GE 2                  | 73.1                        | 73.1    | 73.1    | 74.8    | 77.8    | 77.8        | 78.4    | 80.8      | 80.8        | 80.8    | 80.8      | 80.8      | 80.8      | 80.8       | 80.8      | 81.4    |
| GE 1                  | 73.1                        | 73.1    | 73.1    | 74.8    | 77.8    | 77.8        | 78.4    | 80.8      | 80.8        | 80.8    | 80.8      | 80.8      | 80.8      | 80.8       | 80.8      | 81.4    |
| GE 0                  | 73.1                        | 73.1    | 73.1    | 74.8    | 77.8    | 77.8        | 78.4    | 80.8      | 80.8        | 80.8    | 80.8      | 80.8      | 80.8      | 80.8       | 80.8      | 81.4    |
| GE 2500               | 81.7                        | 81.7    | 81.7    | 83.4    | 86.4    | 86.4        | 87.4    | 89.7      | 89.7        | 89.7    | 89.7      | 89.7      | 89.7      | 89.7       | 89.7      | 90.3    |
| GE 2000               | 81.7                        | 81.7    | 81.7    | 83.4    | 86.4    | 86.4        | 87.4    | 89.7      | 89.7        | 89.7    | 89.7      | 89.7      | 89.7      | 89.7       | 89.7      | 90.3    |
| GE 1500               | 81.7                        | 81.7    | 81.7    | 83.4    | 86.4    | 86.4        | 87.4    | 89.7      | 89.7        | 89.7    | 89.7      | 89.7      | 89.7      | 89.7       | 89.7      | 90.3    |
| GE 1000               | 81.7                        | 81.7    | 81.7    | 83.4    | 86.4    | 86.4        | 87.4    | 89.7      | 89.7        | 89.7    | 89.7      | 89.7      | 89.7      | 89.7       | 89.7      | 90.3    |
| GE 800                | 81.7                        | 81.7    | 81.7    | 83.4    | 86.4    | 86.4        | 87.4    | 89.7      | 89.7        | 89.7    | 89.7      | 89.7      | 89.7      | 89.7       | 89.7      | 90.3    |
| GE 600                | 81.7                        | 81.7    | 81.7    | 83.4    | 86.4    | 86.4        | 87.4    | 89.7      | 89.7        | 89.7    | 89.7      | 89.7      | 89.7      | 89.7       | 89.7      | 90.3    |
| GE 400                | 81.7                        | 81.7    | 81.7    | 83.4    | 86.4    | 86.4        | 87.4    | 89.7      | 89.7        | 89.7    | 89.7      | 89.7      | 89.7      | 89.7       | 89.7      | 90.3    |
| GE 200                | 81.7                        | 81.7    | 81.7    | 83.4    | 86.4    | 86.4        | 87.4    | 89.7      | 89.7        | 89.7    | 89.7      | 89.7      | 89.7      | 89.7       | 89.7      | 90.3    |
| GE 100                | 81.7                        | 81.7    | 81.7    | 83.4    | 86.4    | 86.4        | 87.4    | 89.7      | 89.7        | 89.7    | 89.7      | 89.7      | 89.7      | 89.7       | 89.7      | 90.3    |
| GE 50                 | 81.7                        | 81.7    | 81.7    | 83.4    | 86.4    | 86.4        | 87.4    | 89.7      | 89.7        | 89.7    | 89.7      | 89.7      | 89.7      | 89.7       | 89.7      | 90.3    |
| GE 25                 | 81.7                        | 81.7    | 81.7    | 83.4    | 86.4    | 86.4        | 87.4    | 89.7      | 89.7        | 89.7    | 89.7      | 89.7      | 89.7      | 89.7       | 89.7      | 90.3    |
| GE 15                 | 81.7                        | 81.7    | 81.7    | 83.4    | 86.4    | 86.4        | 87.4    | 89.7      | 89.7        | 89.7    | 89.7      | 89.7      | 89.7      | 89.7       | 89.7      | 90.3    |
| GE 10                 | 81.7                        | 81.7    | 81.7    | 83.4    | 86.4    | 86.4        | 87.4    | 89.7      | 89.7        | 89.7    | 89.7      | 89.7      | 89.7      | 89.7       | 89.7      | 90.3    |
| GE 5                  | 81.7                        | 81.7    | 81.7    | 83.4    | 86.4    | 86.4        | 87.4    | 89.7      | 89.7        | 89.7    | 89.7      | 89.7      | 89.7      | 89.7       | 89.7      | 90.3    |
| GE 2                  | 81.7                        | 81.7    | 81.7    | 83.4    | 86.4    | 86.4        | 87.4    | 89.7      | 89.7        | 89.7    | 89.7      | 89.7      | 89.7      | 89.7       | 89.7      | 90.3    |
| GE 1                  | 81.7                        | 81.7    | 81.7    | 83.4    | 86.4    | 86.4        | 87.4    | 89.7      | 89.7        | 89.7    | 89.7      | 89.7      | 89.7      | 89.7       | 89.7      | 90.3    |
| GE 0                  | 81.7                        | 81.7    | 81.7    | 83.4    | 86.4    | 86.4        | 87.4    | 89.7      | 89.7        | 89.7    | 89.7      | 89.7      | 89.7      | 89.7       | 89.7      | 90.3    |

TOTAL NUMBER OF OBSERVATIONS: 231

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM FOURLY OBSERVATIONS

PERIOD OF RECORD: 78-87  
MONTH: MAR HOURS (LST): ALL

| CEILING  |   | VISIBILITY IN STATUTE MILES |        |        |        |        |      |          |          |          |      |          |          |          |      |          |          |
|----------|---|-----------------------------|--------|--------|--------|--------|------|----------|----------|----------|------|----------|----------|----------|------|----------|----------|
| IN FEET  |   | GE 1/8                      | GE 1/4 | GE 3/8 | GE 1/2 | GE 3/4 | GE 1 | GE 1 1/4 | GE 1 1/2 | GE 1 3/4 | GE 2 | GE 2 1/4 | GE 2 1/2 | GE 2 3/4 | GE 3 | GE 3 1/4 | GE 3 1/2 |
| NO CEIL  | 1 | .1                          | 37.1   | 37.3   | 37.3   | 38.7   | 41.2 | 41.2     | 41.9     | 44.3     | 44.6 | 45.7     | 45.2     | 45.3     | 45.6 | 45.6     | 46.3     |
| GE 10000 | 1 | .1                          | 40.3   | 40.6   | 40.6   | 42.0   | 45.0 | 45.0     | 45.9     | 48.9     | 49.4 | 49.6     | 49.9     | 50.0     | 50.3 | 50.3     | 51.0     |
| GE 18000 | 1 | .1                          | 40.3   | 40.6   | 40.6   | 42.0   | 45.0 | 45.0     | 45.9     | 48.9     | 49.4 | 49.6     | 49.9     | 50.0     | 50.3 | 50.3     | 51.0     |
| GE 19000 | 1 | .1                          | 40.3   | 40.6   | 40.6   | 42.0   | 45.0 | 45.0     | 45.9     | 48.9     | 49.4 | 49.6     | 49.9     | 50.0     | 50.3 | 50.3     | 51.0     |
| GE 14000 | 1 | .1                          | 40.3   | 40.6   | 40.6   | 42.0   | 45.0 | 45.0     | 45.9     | 48.9     | 49.4 | 49.6     | 49.9     | 50.0     | 50.3 | 50.3     | 51.0     |
| GE 12000 | 1 | .1                          | 40.3   | 40.6   | 40.6   | 42.0   | 45.0 | 45.0     | 45.9     | 48.9     | 49.4 | 49.6     | 49.9     | 50.0     | 50.3 | 50.3     | 51.0     |
| GE 10000 | 1 | .1                          | 54.9   | 55.0   | 55.2   | 58.0   | 62.4 | 62.4     | 64.4     | 68.6     | 69.6 | 70.0     | 70.4     | 70.7     | 71.0 | 71.1     | 71.9     |
| GE 9000  | 1 | .1                          | 54.9   | 55.0   | 55.2   | 58.0   | 62.4 | 62.4     | 64.4     | 68.6     | 69.6 | 70.0     | 70.4     | 70.7     | 71.0 | 71.1     | 71.9     |
| GE 8000  | 1 | .1                          | 54.9   | 55.0   | 55.2   | 58.0   | 62.4 | 62.4     | 64.4     | 68.6     | 69.6 | 70.0     | 70.4     | 70.7     | 71.0 | 71.1     | 71.9     |
| GE 7000  | 1 | .1                          | 54.9   | 55.0   | 55.3   | 58.1   | 62.4 | 62.6     | 64.4     | 68.6     | 69.6 | 70.1     | 70.4     | 70.7     | 71.1 | 71.1     | 72.0     |
| GE 6000  | 1 | .1                          | 54.9   | 55.4   | 55.4   | 58.2   | 62.5 | 62.6     | 64.5     | 68.7     | 69.7 | 70.0     | 70.5     | 70.8     | 71.2 | 71.2     | 72.1     |
| GE 5000  | 1 | .1                          | 55.6   | 55.6   | 55.9   | 59.7   | 63.2 | 63.2     | 65.2     | 69.4     | 70.4 | 70.9     | 71.2     | 71.5     | 71.8 | 71.9     | 72.7     |
| GE 4000  | 1 | .1                          | 55.7   | 56.1   | 56.1   | 58.8   | 62.3 | 62.3     | 65.3     | 69.5     | 70.5 | 71.0     | 71.3     | 71.6     | 72.0 | 72.0     | 72.9     |
| GE 3000  | 1 | .1                          | 57.1   | 57.4   | 57.4   | 60.3   | 64.8 | 64.9     | 66.9     | 71.1     | 72.1 | 72.6     | 72.9     | 73.2     | 73.5 | 73.6     | 74.4     |
| GE 2000  | 1 | .1                          | 57.6   | 58.0   | 58.0   | 60.9   | 65.4 | 65.4     | 67.5     | 71.7     | 72.7 | 73.2     | 73.5     | 73.8     | 74.2 | 74.2     | 75.1     |
| GE 1000  | 1 | .1                          | 59.3   | 59.6   | 59.6   | 62.5   | 67.1 | 67.1     | 69.2     | 73.4     | 74.4 | 74.9     | 75.2     | 75.5     | 75.9 | 76.0     | 76.8     |
| GE 2000  | 1 | .1                          | 60.6   | 61.1   | 61.1   | 64.2   | 68.8 | 68.8     | 70.9     | 75.2     | 76.2 | 76.6     | 77.0     | 77.3     | 77.7 | 77.7     | 78.6     |
| GE 1800  | 1 | .1                          | 62.3   | 62.7   | 62.7   | 66.0   | 70.6 | 70.7     | 73.0     | 77.3     | 78.3 | 78.7     | 79.2     | 79.6     | 80.0 | 80.0     | 80.9     |
| GE 1400  | 1 | .1                          | 62.3   | 63.2   | 63.2   | 66.6   | 71.3 | 71.4     | 73.8     | 78.2     | 79.2 | 79.7     | 80.1     | 80.4     | 80.9 | 80.9     | 81.8     |
| GE 1000  | 1 | .1                          | 63.9   | 64.4   | 64.4   | 67.9   | 72.7 | 72.9     | 75.3     | 79.7     | 80.7 | 81.2     | 81.6     | 82.1     | 82.5 | 82.6     | 83.5     |
| GE 1800  | 1 | .1                          | 64.6   | 65.1   | 65.1   | 68.9   | 73.1 | 73.3     | 75.6     | 80.0     | 81.0 | 81.5     | 82.0     | 82.4     | 82.8 | 82.8     | 83.6     |

TOTAL NUMBER OF OBSERVATIONS: 2756

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

PERIOD OF RECORD: 78-87  
MONTH: APR HOURS(LST): 0000-0200

| CEILING |       | VISIBILITY IN STATUTE MILES |   |        |        |        |        |      |          |          |          |      |          |          |          |      |          |
|---------|-------|-----------------------------|---|--------|--------|--------|--------|------|----------|----------|----------|------|----------|----------|----------|------|----------|
|         |       | IN FEET                     |   | GE 1/8 | GE 1/4 | GE 1/2 | GE 3/4 | GE 1 | GE 1 1/4 | GE 1 1/2 | GE 1 3/4 | GE 2 | GE 2 1/4 | GE 2 1/2 | GE 2 3/4 | GE 3 | GE 3 1/4 |
|         |       | 1                           | 2 | 1      | 2      | 1      | 2      | 1    | 2        | 1        | 2        | 1    | 2        | 1        | 2        | 1    | 2        |
| NO      | CEIL  | 1                           |   | 45.7   | 45.7   | 45.7   | 47.1   | 47.6 | 47.8     | 48.1     | 48.1     | 48.1 | 48.4     | 48.8     | 49.1     | 49.1 | 49.5     |
| GE      | 10000 |                             |   | 48.4   | 48.4   | 48.4   | 49.8   | 50.5 | 50.5     | 50.9     | 50.9     | 50.9 | 50.9     | 51.2     | 51.6     | 51.9 | 52.2     |
| GE      | 10000 |                             |   | 48.4   | 48.4   | 48.4   | 49.8   | 50.5 | 50.5     | 50.9     | 50.9     | 50.9 | 50.9     | 51.2     | 51.6     | 51.9 | 52.2     |
| GE      | 10000 |                             |   | 48.4   | 48.4   | 48.4   | 49.8   | 50.5 | 50.5     | 50.9     | 50.9     | 50.9 | 50.9     | 51.2     | 51.6     | 51.9 | 52.2     |
| GE      | 10000 |                             |   | 48.4   | 48.4   | 48.4   | 49.8   | 50.5 | 50.5     | 50.9     | 50.9     | 50.9 | 50.9     | 51.2     | 51.6     | 51.9 | 52.2     |
| GE      | 10000 |                             |   | 48.4   | 48.4   | 48.4   | 49.8   | 50.5 | 50.5     | 50.9     | 50.9     | 50.9 | 50.9     | 51.2     | 51.6     | 51.9 | 52.2     |
| GE      | 10000 |                             |   | 48.4   | 48.4   | 48.4   | 49.8   | 50.5 | 50.5     | 50.9     | 50.9     | 50.9 | 50.9     | 51.2     | 51.6     | 51.9 | 52.2     |
| GE      | 10000 |                             |   | 48.4   | 48.4   | 48.4   | 49.8   | 50.5 | 50.5     | 50.9     | 50.9     | 50.9 | 50.9     | 51.2     | 51.6     | 51.9 | 52.2     |
| GE      | 10000 |                             |   | 48.4   | 48.4   | 48.4   | 49.8   | 50.5 | 50.5     | 50.9     | 50.9     | 50.9 | 50.9     | 51.2     | 51.6     | 51.9 | 52.2     |
| GE      | 10000 |                             |   | 48.4   | 48.4   | 48.4   | 49.8   | 50.5 | 50.5     | 50.9     | 50.9     | 50.9 | 50.9     | 51.2     | 51.6     | 51.9 | 52.2     |
| GE      | 10000 |                             |   | 48.4   | 48.4   | 48.4   | 49.8   | 50.5 | 50.5     | 50.9     | 50.9     | 50.9 | 50.9     | 51.2     | 51.6     | 51.9 | 52.2     |
| GE      | 10000 |                             |   | 48.4   | 48.4   | 48.4   | 49.8   | 50.5 | 50.5     | 50.9     | 50.9     | 50.9 | 50.9     | 51.2     | 51.6     | 51.9 | 52.2     |
| GE      | 10000 |                             |   | 48.4   | 48.4   | 48.4   | 49.8   | 50.5 | 50.5     | 50.9     | 50.9     | 50.9 | 50.9     | 51.2     | 51.6     | 51.9 | 52.2     |
| GE      | 10000 |                             |   | 48.4   | 48.4   | 48.4   | 49.8   | 50.5 | 50.5     | 50.9     | 50.9     | 50.9 | 50.9     | 51.2     | 51.6     | 51.9 | 52.2     |
| GE      | 10000 |                             |   | 48.4   | 48.4   | 48.4   | 49.8   | 50.5 | 50.5     | 50.9     | 50.9     | 50.9 | 50.9     | 51.2     | 51.6     | 51.9 | 52.2     |
| GE      | 10000 |                             |   | 48.4   | 48.4   | 48.4   | 49.8   | 50.5 | 50.5     | 50.9     | 50.9     | 50.9 | 50.9     | 51.2     | 51.6     | 51.9 | 52.2     |
| GE      | 10000 |                             |   | 48.4   | 48.4   | 48.4   | 49.8   | 50.5 | 50.5     | 50.9     | 50.9     | 50.9 | 50.9     | 51.2     | 51.6     | 51.9 | 52.2     |
| GE      | 10000 |                             |   | 48.4   | 48.4   | 48.4   | 49.8   | 50.5 | 50.5     | 50.9     | 50.9     | 50.9 | 50.9     | 51.2     | 51.6     | 51.9 | 52.2     |
| GE      | 10000 |                             |   | 48.4   | 48.4   | 48.4   | 49.8   | 50.5 | 50.5     | 50.9     | 50.9     | 50.9 | 50.9     | 51.2     | 51.6     | 51.9 | 52.2     |
| GE      | 10000 |                             |   | 48.4   | 48.4   | 48.4   | 49.8   | 50.5 | 50.5     | 50.9     | 50.9     | 50.9 | 50.9     | 51.2     | 51.6     | 51.9 | 52.2     |
| GE      | 10000 |                             |   | 48.4   | 48.4   | 48.4   | 49.8   | 50.5 | 50.5     | 50.9     | 50.9     | 50.9 | 50.9     | 51.2     | 51.6     | 51.9 | 52.2     |
| GE      | 10000 |                             |   | 48.4   | 48.4   | 48.4   | 49.8   | 50.5 | 50.5     | 50.9     | 50.9     | 50.9 | 50.9     | 51.2     | 51.6     | 51.9 | 52.2     |
| GE      | 10000 |                             |   | 48.4   | 48.4   | 48.4   | 49.8   | 50.5 | 50.5     | 50.9     | 50.9     | 50.9 | 50.9     | 51.2     | 51.6     | 51.9 | 52.2     |
| GE      | 10000 |                             |   | 48.4   | 48.4   | 48.4   | 49.8   | 50.5 | 50.5     | 50.9     | 50.9     | 50.9 | 50.9     | 51.2     | 51.6     | 51.9 | 52.2     |
| GE      | 10000 |                             |   | 48.4   | 48.4   | 48.4   | 49.8   | 50.5 | 50.5     | 50.9     | 50.9     | 50.9 | 50.9     | 51.2     | 51.6     | 51.9 | 52.2     |
| GE      | 10000 |                             |   | 48.4   | 48.4   | 48.4   | 49.8   | 50.5 | 50.5     | 50.9     | 50.9     | 50.9 | 50.9     | 51.2     | 51.6     | 51.9 | 52.2     |
| GE      | 10000 |                             |   | 48.4   | 48.4   | 48.4   | 49.8   | 50.5 | 50.5     | 50.9     | 50.9     | 50.9 | 50.9     | 51.2     | 51.6     | 51.9 | 52.2     |
| GE      | 10000 |                             |   | 48.4   | 48.4   | 48.4   | 49.8   | 50.5 | 50.5     | 50.9     | 50.9     | 50.9 | 50.9     | 51.2     | 51.6     | 51.9 | 52.2     |
| GE      | 10000 |                             |   | 48.4   | 48.4   | 48.4   | 49.8   | 50.5 | 50.5     | 50.9     | 50.9     | 50.9 | 50.9     | 51.2     | 51.6     | 51.9 | 52.2     |
| GE      | 10000 |                             |   | 48.4   | 48.4   | 48.4   | 49.8   | 50.5 | 50.5     | 50.9     | 50.9     | 50.9 | 50.9     | 51.2     | 51.6     | 51.9 | 52.2     |
| GE      | 10000 |                             |   | 48.4   | 48.4   | 48.4   | 49.8   | 50.5 | 50.5     | 50.9     | 50.9     | 50.9 | 50.9     | 51.2     | 51.6     | 51.9 | 52.2     |
| GE      | 10000 |                             |   | 48.4   | 48.4   | 48.4   | 49.8   | 50.5 | 50.5     | 50.9     | 50.9     | 50.9 | 50.9     | 51.2     | 51.6     | 51.9 | 52.2     |
| GE      | 10000 |                             |   | 48.4   | 48.4   | 48.4   | 49.8   | 50.5 | 50.5     | 50.9     | 50.9     | 50.9 | 50.9     | 51.2     | 51.6     | 51.9 | 52.2     |
| GE      | 10000 |                             |   | 48.4   | 48.4   | 48.4   | 49.8   | 50.5 | 50.5     | 50.9     | 50.9     | 50.9 | 50.9     | 51.2     | 51.6     | 51.9 | 52.2     |
| GE      | 10000 |                             |   | 48.4   | 48.4   | 48.4   | 49.8   | 50.5 | 50.5     | 50.9     | 50.9     | 50.9 | 50.9     | 51.2     | 51.6     | 51.9 | 52.2     |
| GE      | 10000 |                             |   | 48.4   | 48.4   | 48.4   | 49.8   | 50.5 | 50.5     | 50.9     | 50.9     | 50.9 | 50.9     | 51.2     | 51.6     | 51.9 | 52.2     |
| GE      | 10000 |                             |   | 48.4   | 48.4   | 48.4   | 49.8   | 50.5 | 50.5     | 50.9     | 50.9     | 50.9 | 50.9     | 51.2     | 51.6     | 51.9 | 52.2     |
| GE      | 10000 |                             |   | 48.4   | 48.4   | 48.4   | 49.8   | 50.5 | 50.5     | 50.9     | 50.9     | 50.9 | 50.9     | 51.2     | 51.6     | 51.9 | 52.2     |
| GE      | 10000 |                             |   | 48.4   | 48.4   | 48.4   | 49.8   | 50.5 | 50.5     | 50.9     | 50.9     | 50.9 | 50.9     | 51.2     | 51.6     | 51.9 | 52.2     |
| GE      | 10000 |                             |   | 48.4   | 48.4   | 48.4   | 49.8   | 50.5 | 50.5     | 50.9     | 50.9     | 50.9 | 50.9     | 51.2     | 51.6     | 51.9 | 52.2     |
| GE      | 10000 |                             |   | 48.4   | 48.4   | 48.4   | 49.8   | 50.5 | 50.5     | 50.9     | 50.9     | 50.9 | 50.9     | 51.2     | 51.6     | 51.9 | 52.2     |
| GE      | 10000 |                             |   | 48.4   | 48.4   | 48.4   | 49.8   | 50.5 | 50.5     | 50.9     | 50.9     | 50.9 | 50.9     | 51.2     | 51.6     | 51.9 | 52.2     |
| GE      | 10000 |                             |   | 48.4   | 48.4   | 48.4   | 49.8   | 50.5 | 50.5     | 50.9     | 50.9     | 50.9 | 50.9     | 51.2     | 51.6     | 51.9 | 52.2     |
| GE      | 10000 |                             |   | 48.4   | 48.4   | 48.4   | 49.8   | 50.5 | 50.5     | 50.9     | 50.9     | 50.9 | 50.9     | 51.2     | 51.6     | 51.9 | 52.2     |
| GE      | 10000 |                             |   | 48.4   | 48.4   | 48.4   | 49.8   | 50.5 | 50.5     | 50.9     | 50.9     | 50.9 | 50.9     | 51.2     | 51.6     | 51.9 | 52.2     |
| GE      | 10000 |                             |   | 48.4   | 48.4   | 48.4   | 49.8   | 50.5 | 50.5     | 50.9     | 50.9     | 50.9 | 50.9     | 51.2     | 51.6     | 51.9 | 52.2     |
| GE      | 10000 |                             |   | 48.4   | 48.4   | 48.4   | 49.8   | 50.5 | 50.5     | 50.9     | 50.9     | 50.9 | 50.9     | 51.2     | 51.6     | 51.9 | 52.2     |
| GE      | 10000 |                             |   | 48.4   | 48.4   | 48.4   | 49.8   | 50.5 | 50.5     | 50.9     | 50.9     | 50.9 | 50.9     | 51.2     | 51.6     | 51.9 | 52.2     |
| GE      | 10000 |                             |   | 48.4   | 48.4   | 48.4   | 49.8   | 50.5 | 50.5     | 50.9     | 50.9     | 50.9 | 50.9     | 51.2     | 51.6     | 51.9 | 52.2     |
| GE      | 10000 |                             |   | 48.4   | 48.4   | 48.4   | 49.8   | 50.5 | 50.5     | 50.9     | 50.9     | 50.9 | 50.9     | 51.2     | 51.6     | 51.9 | 52.2     |
| GE      | 10000 |                             |   | 48.4   | 48.4   | 48.4   | 49.8   | 50.5 | 50.5     | 50.9     | 50.9     | 50.9 | 50.9     | 51.2     | 51.6     | 51.9 | 52.2     |
| GE      | 10000 |                             |   | 48.4   | 48.4   | 48.4   | 49.8   | 50.5 | 50.5     | 50.9     | 50.9     | 50.9 | 50.9     | 51.2     | 51.6     | 51.9 | 52.2     |
| GE      | 10000 |                             |   | 48.4   | 48.4   | 48.4   | 49.8   | 50.5 | 50.5     | 50.9     | 50.9     | 50.9 | 50.9     | 51.2     | 51.6     | 51.9 | 52.2     |
| GE      | 10000 |                             |   | 48.4   | 48.4   | 48.4   | 49.8   | 50.5 | 50.5     | 50.9     | 50.9     | 50.9 | 50.9     | 51.2     | 51.6     | 51.9 | 52.2     |
| GE      | 10000 |                             |   | 48.4   | 48.4   | 48.4   | 49.8   | 50.5 | 50.5     | 50.9     | 50.9     | 50.9 | 50.9     | 51.2     | 51.6     | 51.9 | 52.2     |
| GE      | 10000 |                             |   | 48.4   | 48.4   | 48.4   | 49.8   | 50.5 | 50.5     | 50.9     | 50.9     | 50.9 | 50.9     | 51.2     | 51.6     | 51.9 | 52.2     |

TOTAL NUMBER OF OBSERVATIONS: 280

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM FOURLY OBSERVATIONS

PERIOD OF RECORD: 78-87  
MONTH: APR HOURS(EST): 0300-0500

[illegible]

TOTAL NUMBER OF OBSERVATIONS: 243

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM FOURLY OBSERVATIONS

FL0100 CF RECORD: 72-87

NOTES: APR HOURS(EST): 0600-0900

| CEILING        |   |         | VISIBILITY IN STATUTE MILES |        |        |        |        |      |          |          |          |      |          |          |          |      |          |
|----------------|---|---------|-----------------------------|--------|--------|--------|--------|------|----------|----------|----------|------|----------|----------|----------|------|----------|
| IN FEET        | 1 | CEILING | GE 1/8                      | GE 1/4 | GE 3/8 | GE 1/2 | GE 3/4 | GE 1 | GE 1 1/4 | GE 1 1/2 | GE 1 3/4 | GE 2 | GE 2 1/4 | GE 2 1/2 | GE 2 3/4 | GE 3 | GE 3 1/4 |
| NO CEILING     | 1 | 7       | 34.0                        | 37.0   | 37.5   | 38.5   | 39.7   | 39.7 | 41.1     | 41.1     | 41.1     | 41.5 | 41.6     | 41.8     | 41.8     | 41.8 | 42.2     |
| GE 0-2000      | 3 | 40.1    | 41.4                        | 41.5   | 41.8   | 43.2   | 43.2   | 44.6 | 44.9     | 44.9     | 44.9     | 45.6 | 45.6     | 45.6     | 45.6     | 45.6 | 46.0     |
| GE 2000-3000   | 7 | 40.1    | 41.4                        | 41.5   | 41.8   | 43.2   | 43.2   | 44.6 | 44.9     | 44.9     | 44.9     | 45.6 | 45.6     | 45.6     | 45.6     | 45.6 | 46.0     |
| GE 3000-4000   | 3 | 40.1    | 41.4                        | 41.5   | 41.8   | 43.2   | 43.2   | 44.6 | 44.9     | 44.9     | 44.9     | 45.6 | 45.6     | 45.6     | 45.6     | 45.6 | 46.0     |
| GE 4000-5000   | 3 | 40.1    | 41.4                        | 41.5   | 41.8   | 43.2   | 43.2   | 44.6 | 44.9     | 44.9     | 44.9     | 45.6 | 45.6     | 45.6     | 45.6     | 45.6 | 46.0     |
| GE 5000-6000   | 7 | 40.1    | 41.4                        | 41.5   | 41.8   | 43.2   | 43.2   | 44.6 | 44.9     | 44.9     | 44.9     | 45.6 | 45.6     | 45.6     | 45.6     | 45.6 | 46.0     |
| GE 6000-7000   | 3 | 55.7    | 56.4                        | 56.4   | 56.4   | 58.9   | 62.0   | 62.0 | 63.8     | 64.5     | 64.8     | 65.9 | 65.9     | 66.6     | 66.6     | 66.6 | 66.9     |
| GE 7000-8000   | 3 | 55.7    | 56.4                        | 56.4   | 56.4   | 58.9   | 62.0   | 62.0 | 63.8     | 64.5     | 64.8     | 65.9 | 65.9     | 66.6     | 66.6     | 66.6 | 66.9     |
| GE 8000-9000   | 3 | 55.7    | 56.4                        | 56.4   | 56.4   | 58.9   | 62.0   | 62.0 | 63.8     | 64.5     | 64.8     | 65.9 | 65.9     | 66.6     | 66.6     | 66.6 | 66.9     |
| GE 9000-10000  | 3 | 55.7    | 56.4                        | 56.4   | 56.4   | 58.9   | 62.0   | 62.0 | 63.8     | 64.5     | 64.8     | 65.9 | 65.9     | 66.6     | 66.6     | 66.6 | 66.9     |
| GE 10000-11000 | 3 | 57.1    | 57.8                        | 57.8   | 57.8   | 60.2   | 63.4   | 63.4 | 65.5     | 66.5     | 66.9     | 67.9 | 67.9     | 68.6     | 68.6     | 68.6 | 69.0     |
| GE 11000-12000 | 3 | 57.1    | 57.8                        | 57.8   | 57.8   | 60.2   | 63.4   | 63.4 | 65.5     | 66.5     | 66.9     | 67.9 | 67.9     | 68.6     | 68.6     | 68.6 | 69.0     |
| GE 12000-13000 | 3 | 57.1    | 57.8                        | 57.8   | 57.8   | 60.2   | 63.4   | 63.4 | 65.5     | 66.5     | 66.9     | 67.9 | 67.9     | 68.6     | 68.6     | 68.6 | 69.0     |
| GE 13000-14000 | 3 | 57.1    | 57.8                        | 57.8   | 57.8   | 60.2   | 63.4   | 63.4 | 65.5     | 66.5     | 66.9     | 67.9 | 67.9     | 68.6     | 68.6     | 68.6 | 69.0     |
| GE 14000-15000 | 3 | 57.1    | 57.8                        | 57.8   | 57.8   | 60.2   | 63.4   | 63.4 | 65.5     | 66.5     | 66.9     | 67.9 | 67.9     | 68.6     | 68.6     | 68.6 | 69.0     |
| GE 15000-16000 | 3 | 57.1    | 57.8                        | 57.8   | 57.8   | 60.2   | 63.4   | 63.4 | 65.5     | 66.5     | 66.9     | 67.9 | 67.9     | 68.6     | 68.6     | 68.6 | 69.0     |
| GE 16000-17000 | 3 | 57.1    | 57.8                        | 57.8   | 57.8   | 60.2   | 63.4   | 63.4 | 65.5     | 66.5     | 66.9     | 67.9 | 67.9     | 68.6     | 68.6     | 68.6 | 69.0     |
| GE 17000-18000 | 3 | 57.1    | 57.8                        | 57.8   | 57.8   | 60.2   | 63.4   | 63.4 | 65.5     | 66.5     | 66.9     | 67.9 | 67.9     | 68.6     | 68.6     | 68.6 | 69.0     |
| GE 18000-19000 | 3 | 57.1    | 57.8                        | 57.8   | 57.8   | 60.2   | 63.4   | 63.4 | 65.5     | 66.5     | 66.9     | 67.9 | 67.9     | 68.6     | 68.6     | 68.6 | 69.0     |
| GE 19000-20000 | 3 | 57.1    | 57.8                        | 57.8   | 57.8   | 60.2   | 63.4   | 63.4 | 65.5     | 66.5     | 66.9     | 67.9 | 67.9     | 68.6     | 68.6     | 68.6 | 69.0     |
| GE 20000-21000 | 3 | 57.1    | 57.8                        | 57.8   | 57.8   | 60.2   | 63.4   | 63.4 | 65.5     | 66.5     | 66.9     | 67.9 | 67.9     | 68.6     | 68.6     | 68.6 | 69.0     |
| GE 21000-22000 | 3 | 57.1    | 57.8                        | 57.8   | 57.8   | 60.2   | 63.4   | 63.4 | 65.5     | 66.5     | 66.9     | 67.9 | 67.9     | 68.6     | 68.6     | 68.6 | 69.0     |
| GE 22000-23000 | 3 | 57.1    | 57.8                        | 57.8   | 57.8   | 60.2   | 63.4   | 63.4 | 65.5     | 66.5     | 66.9     | 67.9 | 67.9     | 68.6     | 68.6     | 68.6 | 69.0     |
| GE 23000-24000 | 3 | 57.1    | 57.8                        | 57.8   | 57.8   | 60.2   | 63.4   | 63.4 | 65.5     | 66.5     | 66.9     | 67.9 | 67.9     | 68.6     | 68.6     | 68.6 | 69.0     |
| GE 24000-25000 | 3 | 57.1    | 57.8                        | 57.8   | 57.8   | 60.2   | 63.4   | 63.4 | 65.5     | 66.5     | 66.9     | 67.9 | 67.9     | 68.6     | 68.6     | 68.6 | 69.0     |
| GE 25000-26000 | 3 | 57.1    | 57.8                        | 57.8   | 57.8   | 60.2   | 63.4   | 63.4 | 65.5     | 66.5     | 66.9     | 67.9 | 67.9     | 68.6     | 68.6     | 68.6 | 69.0     |
| GE 26000-27000 | 3 | 57.1    | 57.8                        | 57.8   | 57.8   | 60.2   | 63.4   | 63.4 | 65.5     | 66.5     | 66.9     | 67.9 | 67.9     | 68.6     | 68.6     | 68.6 | 69.0     |
| GE 27000-28000 | 3 | 57.1    | 57.8                        | 57.8   | 57.8   | 60.2   | 63.4   | 63.4 | 65.5     | 66.5     | 66.9     | 67.9 | 67.9     | 68.6     | 68.6     | 68.6 | 69.0     |
| GE 28000-29000 | 3 | 57.1    | 57.8                        | 57.8   | 57.8   | 60.2   | 63.4   | 63.4 | 65.5     | 66.5     | 66.9     | 67.9 | 67.9     | 68.6     | 68.6     | 68.6 | 69.0     |
| GE 29000-30000 | 3 | 57.1    | 57.8                        | 57.8   | 57.8   | 60.2   | 63.4   | 63.4 | 65.5     | 66.5     | 66.9     | 67.9 | 67.9     | 68.6     | 68.6     | 68.6 | 69.0     |
| GE 30000-31000 | 3 | 57.1    | 57.8                        | 57.8   | 57.8   | 60.2   | 63.4   | 63.4 | 65.5     | 66.5     | 66.9     | 67.9 | 67.9     | 68.6     | 68.6     | 68.6 | 69.0     |
| GE 31000-32000 | 3 | 57.1    | 57.8                        | 57.8   | 57.8   | 60.2   | 63.4   | 63.4 | 65.5     | 66.5     | 66.9     | 67.9 | 67.9     | 68.6     | 68.6     | 68.6 | 69.0     |
| GE 32000-33000 | 3 | 57.1    | 57.8                        | 57.8   | 57.8   | 60.2   | 63.4   | 63.4 | 65.5     | 66.5     | 66.9     | 67.9 | 67.9     | 68.6     | 68.6     | 68.6 | 69.0     |
| GE 33000-34000 | 3 | 57.1    | 57.8                        | 57.8   | 57.8   | 60.2   | 63.4   | 63.4 | 65.5     | 66.5     | 66.9     | 67.9 | 67.9     | 68.6     | 68.6     | 68.6 | 69.0     |
| GE 34000-35000 | 3 | 57.1    | 57.8                        | 57.8   | 57.8   | 60.2   | 63.4   | 63.4 | 65.5     | 66.5     | 66.9     | 67.9 | 67.9     | 68.6     | 68.6     | 68.6 | 69.0     |
| GE 35000-36000 | 3 | 57.1    | 57.8                        | 57.8   | 57.8   | 60.2   | 63.4   | 63.4 | 65.5     | 66.5     | 66.9     | 67.9 | 67.9     | 68.6     | 68.6     | 68.6 | 69.0     |
| GE 36000-37000 | 3 | 57.1    | 57.8                        | 57.8   | 57.8   | 60.2   | 63.4   | 63.4 | 65.5     | 66.5     | 66.9     | 67.9 | 67.9     | 68.6     | 68.6     | 68.6 | 69.0     |
| GE 37000-38000 | 3 | 57.1    | 57.8                        | 57.8   | 57.8   | 60.2   | 63.4   | 63.4 | 65.5     | 66.5     | 66.9     | 67.9 | 67.9     | 68.6     | 68.6     | 68.6 | 69.0     |
| GE 38000-39000 | 3 | 57.1    | 57.8                        | 57.8   | 57.8   | 60.2   | 63.4   | 63.4 | 65.5     | 66.5     | 66.9     | 67.9 | 67.9     | 68.6     | 68.6     | 68.6 | 69.0     |
| GE 39000-40000 | 3 | 57.1    | 57.8                        | 57.8   | 57.8   | 60.2   | 63.4   | 63.4 | 65.5     | 66.5     | 66.9     | 67.9 | 67.9     | 68.6     | 68.6     | 68.6 | 69.0     |
| GE 40000-41000 | 3 | 57.1    | 57.8                        | 57.8   | 57.8   | 60.2   | 63.4   | 63.4 | 65.5     | 66.5     | 66.9     | 67.9 | 67.9     | 68.6     | 68.6     | 68.6 | 69.0     |
| GE 41000-42000 | 3 | 57.1    | 57.8                        | 57.8   | 57.8   | 60.2   | 63.4   | 63.4 | 65.5     | 66.5     | 66.9     | 67.9 | 67.9     | 68.6     | 68.6     | 68.6 | 69.0     |
| GE 42000-43000 | 3 | 57.1    | 57.8                        | 57.8   | 57.8   | 60.2   | 63.4   | 63.4 | 65.5     | 66.5     | 66.9     | 67.9 | 67.9     | 68.6     | 68.6     | 68.6 | 69.0     |
| GE 43000-44000 | 3 | 57.1    | 57.8                        | 57.8   | 57.8   | 60.2   | 63.4   | 63.4 | 65.5     | 66.5     | 66.9     | 67.9 | 67.9     | 68.6     | 68.6     | 68.6 | 69.0     |
| GE 44000-45000 | 3 | 57.1    | 57.8                        | 57.8   | 57.8   | 60.2   | 63.4   | 63.4 | 65.5     | 66.5     | 66.9     | 67.9 | 67.9     | 68.6     | 68.6     | 68.6 | 69.0     |
| GE 45000-46000 | 3 | 57.1    | 57.8                        | 57.8   | 57.8   | 60.2   | 63.4   | 63.4 | 65.5     | 66.5     | 66.9     | 67.9 | 67.9     | 68.6     | 68.6     | 68.6 | 69.0     |
| GE 46000-47000 | 3 | 57.1    | 57.8                        | 57.8   | 57.8   | 60.2   | 63.4   | 63.4 | 65.5     | 66.5     | 66.9     | 67.9 | 67.9     | 68.6     | 68.6     | 68.6 | 69.0     |
| GE 47000-48000 | 3 | 57.1    | 57.8                        | 57.8   | 57.8   | 60.2   | 63.4   | 63.4 | 65.5     | 66.5     | 66.9     | 67.9 | 67.9     | 68.6     | 68.6     | 68.6 | 69.0     |
| GE 48000-49000 | 3 | 57.1    | 57.8                        | 57.8   | 57.8   | 60.2   | 63.4   | 63.4 | 65.5     | 66.5     | 66.9     | 67.9 | 67.9     | 68.6     | 68.6     | 68.6 | 69.0     |
| GE 49000-50000 | 3 | 57.1    | 57.8                        | 57.8   | 57.8   | 60.2   | 63.4   | 63.4 | 65.5     | 66.5     | 66.9     | 67.9 | 67.9     | 68.6     | 68.6     | 68.6 | 69.0     |
| GE 50000-51000 | 3 | 57.1    | 57.8                        | 57.8   | 57.8   | 60.2   | 63.4   | 63.4 | 65.5     | 66.5     | 66.9     | 67.9 | 67.9     | 68.6     | 68.6     | 68.6 | 69.0     |
| GE 51000-52000 | 3 | 57.1    | 57.8                        | 57.8   | 57.8   | 60.2   | 63.4   | 63.4 | 65.5     | 66.5     | 66.9     | 67.9 | 67.9     | 68.6     | 68.6     | 68.6 | 69.0     |
| GE 52000-53000 | 3 | 57.1    | 57.8                        | 57.8   | 57.8   | 60.2   | 63.4   | 63.4 | 65.5     | 66.5     | 66.9     | 67.9 | 67.9     | 68.6     | 68.6     | 68.6 | 69.0     |
| GE 53000-54000 | 3 | 57.1    | 57.8                        | 57.8   | 57.8   | 60.2   | 63.4   | 63.4 | 65.5     | 66.5     | 66.9     | 67.9 | 67.9     | 68.6     | 68.6     | 68.6 | 69.0     |
| GE 54000-55000 | 3 | 57.1    | 57.8                        | 57.8   | 57.8   | 60.2   | 63.4   | 63.4 | 65.5     | 66.5     | 66.9     | 67.9 | 67.9     | 68.6     | 68.6     | 68.6 | 69.0     |
| GE 55000-56000 | 3 | 57.1    | 57.8                        | 57.8   | 57.8   | 60.2   | 63.4   | 63.4 | 65.5     | 66.5     | 66.9     | 67.9 | 67.9     | 68.6     | 68.6     | 68.6 | 69.0     |
| GE 56000-57000 | 3 | 57.1    | 57.8                        | 57.8   | 57.8   | 60.2   | 63.4   | 63.4 | 65.5     | 66.5     | 66.9     | 67.9 | 67.9     | 68.6     | 68.6     | 68.6 | 69.0     |
| GE 57000-58000 | 3 | 57.1    | 57.8                        | 57.8   | 57.8   | 60.2   | 63.4   | 63.4 | 65.5     | 66.5     | 66.9     | 67.9 | 67.9     | 68.6     | 68.6     | 68.6 | 69.0     |
| GE 58000-59000 | 3 | 57.1    | 57.8                        | 57.8   | 57.8   | 60.2   | 63.4   | 63.4 | 65.5     | 66.5     | 66.9     | 67.9 | 67.9     | 68.6     | 68.6     | 68.6 | 69.0     |
| GE 59000-60000 | 3 | 57.1    | 57.8                        | 57.8   | 57.8   | 60.2   | 63.4   | 63.4 | 65.5     | 66.5     | 66.9     | 67.9 | 67.9     | 68.6     | 68.6     | 68.6 | 69.0     |
| GE 60000-61000 | 3 | 57.1    | 57.8                        | 57.8   | 57.8   | 60.2   | 63.4   | 63.4 | 65.5     | 66.5     | 66.9     | 67.9 | 67.9     | 68.6     | 68.6     | 68.6 | 69.0     |
| GE 61000-62000 | 3 | 57.1    | 57.8                        | 57.8   | 57.8   | 60.2   | 63.4   | 63.4 | 65.5     | 66.5     | 66.9     | 67.9 | 67.9     | 68.6     | 68.6     | 68.6 | 69.0     |
| GE 62000-63000 | 3 | 57.1    | 57.8                        | 57.8   | 57.8   | 60.2   | 63.4   | 63.4 | 65.5     | 66.5     | 66.9     | 67.9 | 67.9     | 68.6     | 68.6     | 68.6 | 69.0     |
| GE 63000-64000 | 3 | 57.1    | 57.8                        | 57.8   | 57.8   | 60.2   | 63.4   | 63.4 | 65.5     | 66.5     | 66.9     | 67.9 | 67.9     | 68.6     | 68.6     | 68.6 | 69.0     |
| GE 64000-65000 | 3 | 57.1    | 57.8                        | 57.8   | 57.8   | 60.2   | 63.4   | 63.4 | 65.5     | 66.5     | 66.9     | 67.9 | 67.9     | 68.6     | 68.6     | 68.6 | 69.0     |
| GE 65000-66000 | 3 | 57.1    | 57.8                        | 57.8   | 57.8   | 60.2   | 63.4   | 63.4 | 65.5     | 66.5     | 66.9     | 67.9 | 67.9     | 68.6     | 68.6     | 68.6 | 69.0     |
| GE 66000-67000 | 3 | 57.1    | 57.8                        | 57.8   | 57.8   | 60.2   | 63.4   | 63.4 | 65.5     | 66.5     | 66.9     | 67.9 | 67.9     | 68.6     | 68.6     | 68.6 | 69.0     |
| GE 67000-68000 | 3 | 57.1    | 57.8                        | 57.8   | 57.8   | 60.2   | 63.4   | 63.4 | 65.5     | 66.5     | 66.9     | 67.9 | 67.9     | 68.6     | 68.6     | 68.6 | 69.0     |
| GE 68000-69000 | 3 | 57.1    | 57.8                        | 57.8   | 57.8   | 60.2   | 63.4   | 63.4 | 65.5     | 66.5     | 66.9     | 67.9 | 67.9     | 68.6     | 68.6     | 68.6 | 69.0     |
| GE 69000-70000 | 3 | 57.1    | 57.8                        | 57.8   | 57.8   | 60.2   | 63.4   | 63.4 | 65.5     | 66.5     | 66.9     | 67.9 | 67.9     | 68.6     | 68.6     | 68.6 | 69.0     |
| GE 70000-71000 | 3 | 57.1    | 57.8                        | 57.8   | 57.8   | 60.2   | 63.4   | 63.4 | 65.5     | 66.5     | 66.9     | 67.9 | 67.9     | 68.6     | 68.6     | 68.6 |          |

TOTAL NUMBER OF OBSERVATIONS: 297

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

FILED (F) RECORD: 78-87  
MONTH: APR HOURS (LST): 0900-1100

[illegible]

TOTAL NUMBER OF OBSERVATIONS: 261

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VISUS VISIBILITY  
FROM HOURLY OBSERVATIONS

PERIOD OF RECORD: 78-87  
MONTH: APR HOURS (LAST): 1700-1400

| NO | CEILING | VISIBILITY IN STATUTE MILES |      |      |      |       |      |      |      |      |      |      |      |      |      |      |      |
|----|---------|-----------------------------|------|------|------|-------|------|------|------|------|------|------|------|------|------|------|------|
|    |         | 1                           | 1/2  | 3/4  | 2    | 2 1/2 | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   |
|    |         | FEET                        | 100  | 200  | 300  | 400   | 500  | 600  | 700  | 800  | 900  | 1000 | 1100 | 1200 | 1300 | 1400 | 1500 |
| NO | CEILING | 1                           | 1.1  | 75.4 | 81.4 | 85.5  | 88.3 | 77.9 | 37.9 | 77.9 | 38.6 | 78.6 | 38.6 | 78.6 | 38.6 | 78.6 | 38.6 |
| GE | 20000   | 1.1                         | 41.4 | 41.4 | 42.1 | 43.5  | 44.6 | 44.6 | 44.6 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 |
| GE | 40000   | 1.1                         | 41.4 | 41.4 | 42.1 | 43.5  | 44.6 | 44.6 | 44.6 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 |
| GE | 60000   | 1.1                         | 41.4 | 41.4 | 42.1 | 43.5  | 44.6 | 44.6 | 44.6 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 |
| GE | 80000   | 1.1                         | 41.4 | 41.4 | 42.1 | 43.5  | 44.6 | 44.6 | 44.6 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 |
| GE | 100000  | 1.1                         | 41.4 | 41.4 | 42.1 | 43.5  | 44.6 | 44.6 | 44.6 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 |
| GE | 120000  | 1.1                         | 41.4 | 41.4 | 42.1 | 43.5  | 44.6 | 44.6 | 44.6 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 |
| GE | 140000  | 1.1                         | 57.9 | 57.9 | 58.2 | 59.6  | 61.4 | 61.4 | 61.4 | 62.5 | 62.5 | 62.5 | 62.5 | 62.5 | 62.5 | 62.5 | 62.5 |
| GE | 160000  | 1.1                         | 57.9 | 57.9 | 58.2 | 59.6  | 61.4 | 61.4 | 61.4 | 62.5 | 62.5 | 62.5 | 62.5 | 62.5 | 62.5 | 62.5 | 62.5 |
| GE | 180000  | 1.1                         | 57.9 | 57.9 | 58.2 | 59.6  | 61.4 | 61.4 | 61.4 | 62.5 | 62.5 | 62.5 | 62.5 | 62.5 | 62.5 | 62.5 | 62.5 |
| GE | 200000  | 1.1                         | 57.9 | 57.9 | 58.2 | 59.6  | 61.4 | 61.4 | 61.4 | 62.5 | 62.5 | 62.5 | 62.5 | 62.5 | 62.5 | 62.5 | 62.5 |
| GE | 220000  | 1.1                         | 61.1 | 61.1 | 61.4 | 62.8  | 64.6 | 64.6 | 64.9 | 65.6 | 65.6 | 65.6 | 65.6 | 65.6 | 65.6 | 65.6 | 65.6 |
| GE | 240000  | 1.1                         | 61.1 | 61.1 | 61.4 | 62.8  | 64.6 | 64.6 | 64.9 | 65.6 | 65.6 | 65.6 | 65.6 | 65.6 | 65.6 | 65.6 | 65.6 |
| GE | 260000  | 1.1                         | 64.4 | 64.4 | 64.6 | 66.7  | 67.7 | 67.7 | 68.1 | 68.8 | 68.8 | 68.8 | 68.8 | 68.8 | 68.8 | 68.8 | 68.8 |
| GE | 280000  | 1.1                         | 64.4 | 64.4 | 64.6 | 66.7  | 67.7 | 67.7 | 68.1 | 68.8 | 68.8 | 68.8 | 68.8 | 68.8 | 68.8 | 68.8 | 68.8 |
| GE | 300000  | 1.1                         | 65.6 | 65.6 | 66.0 | 67.4  | 69.1 | 69.1 | 69.5 | 69.8 | 69.8 | 69.8 | 69.8 | 69.8 | 69.8 | 69.8 | 69.8 |
| GE | 320000  | 1.1                         | 72.6 | 72.6 | 73.0 | 74.7  | 76.5 | 76.5 | 77.2 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 |
| GE | 340000  | 1.1                         | 72.6 | 72.6 | 73.0 | 74.7  | 76.5 | 76.5 | 77.2 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 |
| GE | 360000  | 1.1                         | 72.6 | 72.6 | 73.0 | 74.7  | 76.5 | 76.5 | 77.2 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 |
| GE | 380000  | 1.1                         | 72.6 | 72.6 | 73.0 | 74.7  | 76.5 | 76.5 | 77.2 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 |
| GE | 400000  | 1.1                         | 72.6 | 72.6 | 73.0 | 74.7  | 76.5 | 76.5 | 77.2 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 |
| GE | 420000  | 1.1                         | 72.6 | 72.6 | 73.0 | 74.7  | 76.5 | 76.5 | 77.2 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 |
| GE | 440000  | 1.1                         | 72.6 | 72.6 | 73.0 | 74.7  | 76.5 | 76.5 | 77.2 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 |
| GE | 460000  | 1.1                         | 72.6 | 72.6 | 73.0 | 74.7  | 76.5 | 76.5 | 77.2 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 |
| GE | 480000  | 1.1                         | 72.6 | 72.6 | 73.0 | 74.7  | 76.5 | 76.5 | 77.2 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 |
| GE | 500000  | 1.1                         | 72.6 | 72.6 | 73.0 | 74.7  | 76.5 | 76.5 | 77.2 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 |
| GE | 520000  | 1.1                         | 72.6 | 72.6 | 73.0 | 74.7  | 76.5 | 76.5 | 77.2 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 |
| GE | 540000  | 1.1                         | 72.6 | 72.6 | 73.0 | 74.7  | 76.5 | 76.5 | 77.2 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 |
| GE | 560000  | 1.1                         | 72.6 | 72.6 | 73.0 | 74.7  | 76.5 | 76.5 | 77.2 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 |
| GE | 580000  | 1.1                         | 72.6 | 72.6 | 73.0 | 74.7  | 76.5 | 76.5 | 77.2 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 |
| GE | 600000  | 1.1                         | 72.6 | 72.6 | 73.0 | 74.7  | 76.5 | 76.5 | 77.2 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 |
| GE | 620000  | 1.1                         | 72.6 | 72.6 | 73.0 | 74.7  | 76.5 | 76.5 | 77.2 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 |
| GE | 640000  | 1.1                         | 72.6 | 72.6 | 73.0 | 74.7  | 76.5 | 76.5 | 77.2 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 |
| GE | 660000  | 1.1                         | 72.6 | 72.6 | 73.0 | 74.7  | 76.5 | 76.5 | 77.2 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 |
| GE | 680000  | 1.1                         | 72.6 | 72.6 | 73.0 | 74.7  | 76.5 | 76.5 | 77.2 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 |
| GE | 700000  | 1.1                         | 72.6 | 72.6 | 73.0 | 74.7  | 76.5 | 76.5 | 77.2 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 |
| GE | 720000  | 1.1                         | 72.6 | 72.6 | 73.0 | 74.7  | 76.5 | 76.5 | 77.2 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 |
| GE | 740000  | 1.1                         | 72.6 | 72.6 | 73.0 | 74.7  | 76.5 | 76.5 | 77.2 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 |
| GE | 760000  | 1.1                         | 72.6 | 72.6 | 73.0 | 74.7  | 76.5 | 76.5 | 77.2 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 |
| GE | 780000  | 1.1                         | 72.6 | 72.6 | 73.0 | 74.7  | 76.5 | 76.5 | 77.2 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 |
| GE | 800000  | 1.1                         | 72.6 | 72.6 | 73.0 | 74.7  | 76.5 | 76.5 | 77.2 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 |
| GE | 820000  | 1.1                         | 72.6 | 72.6 | 73.0 | 74.7  | 76.5 | 76.5 | 77.2 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 |
| GE | 840000  | 1.1                         | 72.6 | 72.6 | 73.0 | 74.7  | 76.5 | 76.5 | 77.2 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 |
| GE | 860000  | 1.1                         | 72.6 | 72.6 | 73.0 | 74.7  | 76.5 | 76.5 | 77.2 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 |
| GE | 880000  | 1.1                         | 72.6 | 72.6 | 73.0 | 74.7  | 76.5 | 76.5 | 77.2 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 |
| GE | 900000  | 1.1                         | 72.6 | 72.6 | 73.0 | 74.7  | 76.5 | 76.5 | 77.2 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 |
| GE | 920000  | 1.1                         | 72.6 | 72.6 | 73.0 | 74.7  | 76.5 | 76.5 | 77.2 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 |
| GE | 940000  | 1.1                         | 72.6 | 72.6 | 73.0 | 74.7  | 76.5 | 76.5 | 77.2 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 |
| GE | 960000  | 1.1                         | 72.6 | 72.6 | 73.0 | 74.7  | 76.5 | 76.5 | 77.2 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 |
| GE | 980000  | 1.1                         | 72.6 | 72.6 | 73.0 | 74.7  | 76.5 | 76.5 | 77.2 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 |
| GE | 1000000 | 1.1                         | 72.6 | 72.6 | 73.0 | 74.7  | 76.5 | 76.5 | 77.2 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 |
| GE | 1020000 | 1.1                         | 72.6 | 72.6 | 73.0 | 74.7  | 76.5 | 76.5 | 77.2 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 |
| GE | 1040000 | 1.1                         | 72.6 | 72.6 | 73.0 | 74.7  | 76.5 | 76.5 | 77.2 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 |
| GE | 1060000 | 1.1                         | 72.6 | 72.6 | 73.0 | 74.7  | 76.5 | 76.5 | 77.2 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 |
| GE | 1080000 | 1.1                         | 72.6 | 72.6 | 73.0 | 74.7  | 76.5 | 76.5 | 77.2 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 |
| GE | 1100000 | 1.1                         | 72.6 | 72.6 | 73.0 | 74.7  | 76.5 | 76.5 | 77.2 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 |
| GE | 1120000 | 1.1                         | 72.6 | 72.6 | 73.0 | 74.7  | 76.5 | 76.5 | 77.2 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 |
| GE | 1140000 | 1.1                         | 72.6 | 72.6 | 73.0 | 74.7  | 76.5 | 76.5 | 77.2 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 |
| GE | 1160000 | 1.1                         | 72.6 | 72.6 | 73.0 | 74.7  | 76.5 | 76.5 | 77.2 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 |
| GE | 1180000 | 1.1                         | 72.6 | 72.6 | 73.0 | 74.7  | 76.5 | 76.5 | 77.2 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 |
| GE | 1200000 | 1.1                         | 72.6 | 72.6 | 73.0 | 74.7  | 76.5 | 76.5 | 77.2 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 |
| GE | 1220000 | 1.1                         | 72.6 | 72.6 | 73.0 | 74.7  | 76.5 | 76.5 | 77.2 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 |
| GE | 1240000 | 1.1                         | 72.6 | 72.6 | 73.0 | 74.7  | 76.5 | 76.5 | 77.2 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 |
| GE | 1260000 | 1.1                         | 72.6 | 72.6 | 73.0 | 74.7  | 76.5 | 76.5 | 77.2 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 |
| GE | 1280000 | 1.1                         | 72.6 | 72.6 | 73.0 | 74.7  | 76.5 | 76.5 | 77.2 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 |
| GE | 1300000 | 1.1                         | 72.6 | 72.6 | 73.0 | 74.7  | 76.5 | 76.5 | 77.2 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 |
| GE | 1320000 | 1.1                         | 72.6 | 72.6 | 73.0 | 74.7  | 76.5 | 76.5 | 77.2 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 |
| GE | 1340000 | 1.1                         | 72.6 | 72.6 | 73.0 | 74.7  | 76.5 | 76.5 | 77.2 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 |
| GE | 1360000 | 1.1                         | 72.6 | 72.6 | 73.0 | 74.7  | 76.5 | 76.5 | 77.2 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 |
| GE | 1380000 | 1.1                         | 72.6 | 72.6 | 73.0 | 74.7  | 76.5 | 76.5 | 77.2 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 |
| GE | 1400000 | 1.1                         | 72.6 | 72.6 | 73.0 | 74.7  | 76.5 | 76.5 | 77.2 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 |
| GE | 1420000 | 1.1                         | 72.6 | 72.6 | 73.0 | 74.7  | 76.5 | 76.5 | 77.2 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 |
| GE | 1440000 | 1.1                         | 72.6 | 72.6 | 73.0 | 74.7  | 76.5 | 76.5 | 77.2 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 |
| GE | 1460000 | 1.1                         | 72.6 | 72.6 | 73.0 | 74.7  | 76.5 | 76.5 | 77.2 | 77.9 | 77.9 |      |      |      |      |      |      |

TOTAL NUMBER OF OBSERVATIONS: 255

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM FOURLY OBSERVATIONS

PERIOD OF RECORD: 7a-87  
DATE: APR FOUR (1981): 1980-1980

[illegible]

TOTAL NUMBER OF OBSERVATIONS: 255

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

PERIOD OF RECORD: 78-87  
MONTH: APR HOURS (LST): 1800-2300

[illegible]

TOTAL NUMBER OF OBSERVATIONS: 248

GLOBAL CLIMATOLOGY BRANCH  
USAF/CIAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM FOURLY OBSERVATIONS

STATION NUMBER: 27590 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: APR HOURS(LEST): 2100-2300

| CEILING<br>FEET | VISIBILITY IN STATUTE MILES |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |
|-----------------|-----------------------------|---------|---------|---------|---------|---------|---------|---------|---------|----------|----------|----------|----------|----------|----------|----------|
|                 | GE<br>1                     | GE<br>2 | GE<br>3 | GE<br>4 | GE<br>5 | GE<br>6 | GE<br>7 | GE<br>8 | GE<br>9 | GE<br>10 | GE<br>11 | GE<br>12 | GE<br>13 | GE<br>14 | GE<br>15 | GE<br>16 |
| NO CEIL         |                             | 47.5    | 47.5    | 47.5    | 48.6    | 48.6    | 48.6    | 48.6    | 48.6    | 48.6     | 48.6     | 48.6     | 48.6     | 48.6     | 48.6     | 48.6     |
| GE 2000         | 50.7                        | 50.7    | 50.7    | 51.4    | 51.4    | 51.4    | 51.4    | 51.4    | 51.4    | 51.4     | 51.4     | 51.4     | 51.4     | 51.4     | 51.4     | 51.4     |
| GE 1800         | 50.7                        | 50.7    | 50.7    | 51.4    | 51.4    | 51.4    | 51.4    | 51.4    | 51.4    | 51.4     | 51.4     | 51.4     | 51.4     | 51.4     | 51.4     | 51.4     |
| GE 1600         | 50.7                        | 50.7    | 50.7    | 51.4    | 51.4    | 51.4    | 51.4    | 51.4    | 51.4    | 51.4     | 51.4     | 51.4     | 51.4     | 51.4     | 51.4     | 51.4     |
| GE 1400         | 50.7                        | 50.7    | 50.7    | 51.4    | 51.4    | 51.4    | 51.4    | 51.4    | 51.4    | 51.4     | 51.4     | 51.4     | 51.4     | 51.4     | 51.4     | 51.4     |
| GE 1200         | 50.7                        | 50.7    | 50.7    | 51.4    | 51.4    | 51.4    | 51.4    | 51.4    | 51.4    | 51.4     | 51.4     | 51.4     | 51.4     | 51.4     | 51.4     | 51.4     |
| GE 1000         | 70.5                        | 70.5    | 70.5    | 71.6    | 72.9    | 72.9    | 72.9    | 73.3    | 73.6    | 73.6     | 73.6     | 73.6     | 73.6     | 74.0     | 74.3     | 74.3     |
| GE 900          | 70.5                        | 70.5    | 70.5    | 71.6    | 72.9    | 72.9    | 72.9    | 73.3    | 73.6    | 73.6     | 73.6     | 73.6     | 73.6     | 74.0     | 74.3     | 74.3     |
| GE 800          | 70.5                        | 70.5    | 70.5    | 71.6    | 72.9    | 72.9    | 72.9    | 73.3    | 73.6    | 73.6     | 73.6     | 73.6     | 73.6     | 74.0     | 74.3     | 74.3     |
| GE 700          | 70.5                        | 70.5    | 70.5    | 71.6    | 72.9    | 72.9    | 72.9    | 73.3    | 73.6    | 73.6     | 73.6     | 73.6     | 73.6     | 74.0     | 74.3     | 74.3     |
| GE 600          | 70.5                        | 70.5    | 70.5    | 72.3    | 72.6    | 73.6    | 73.6    | 74.0    | 74.3    | 74.3     | 74.3     | 74.3     | 74.3     | 74.7     | 75.0     | 75.0     |
| GE 500          | 73.6                        | 73.6    | 73.6    | 75.0    | 76.7    | 76.7    | 77.1    | 77.4    | 77.7    | 77.7     | 77.7     | 77.7     | 77.7     | 78.1     | 78.4     | 78.4     |
| GE 400          | 74.0                        | 74.0    | 74.0    | 75.3    | 77.1    | 77.1    | 77.4    | 77.7    | 78.1    | 78.1     | 78.1     | 78.1     | 78.1     | 78.4     | 78.8     | 78.8     |
| GE 300          | 76.4                        | 76.4    | 76.4    | 77.7    | 80.1    | 80.1    | 80.5    | 80.8    | 81.5    | 81.5     | 81.5     | 81.5     | 81.5     | 81.8     | 82.2     | 82.2     |
| GE 200          | 76.7                        | 76.7    | 76.7    | 78.1    | 80.5    | 80.5    | 80.8    | 81.2    | 81.8    | 81.8     | 81.8     | 81.8     | 81.8     | 82.2     | 82.5     | 82.5     |
| GE 100          | 78.4                        | 78.4    | 78.4    | 79.8    | 82.2    | 82.2    | 82.5    | 82.9    | 83.6    | 83.6     | 83.6     | 83.6     | 83.6     | 83.9     | 84.2     | 84.2     |
| GE 2000         | 79.1                        | 79.1    | 79.1    | 80.5    | 82.9    | 82.9    | 83.2    | 83.6    | 84.2    | 84.2     | 84.2     | 84.2     | 84.2     | 84.6     | 84.9     | 84.9     |
| GE 1800         | 80.5                        | 80.5    | 80.5    | 82.2    | 84.6    | 84.6    | 84.9    | 85.3    | 86.0    | 86.0     | 86.0     | 86.0     | 86.0     | 86.3     | 86.6     | 86.6     |
| GE 1600         | 80.5                        | 80.5    | 80.5    | 82.2    | 84.6    | 84.6    | 84.9    | 85.3    | 86.0    | 86.0     | 86.0     | 86.0     | 86.0     | 86.3     | 86.6     | 86.6     |
| GE 1400         | 81.5                        | 81.5    | 81.5    | 82.6    | 84.6    | 84.6    | 84.9    | 85.3    | 86.0    | 86.0     | 86.0     | 86.0     | 86.0     | 86.3     | 86.6     | 86.6     |
| GE 1200         | 81.5                        | 81.5    | 81.5    | 82.6    | 84.6    | 84.6    | 84.9    | 85.3    | 86.0    | 86.0     | 86.0     | 86.0     | 86.0     | 86.3     | 86.6     | 86.6     |
| GE 1000         | 82.2                        | 82.2    | 82.2    | 83.6    | 86.3    | 86.3    | 86.7    | 87.4    | 88.1    | 88.1     | 88.1     | 88.1     | 88.1     | 88.4     | 88.7     | 88.7     |
| GE 900          | 82.2                        | 82.2    | 82.2    | 83.6    | 86.3    | 86.3    | 86.7    | 87.4    | 88.1    | 88.1     | 88.1     | 88.1     | 88.1     | 88.4     | 88.7     | 88.7     |
| GE 800          | 82.2                        | 82.2    | 82.2    | 83.6    | 86.3    | 86.3    | 86.7    | 87.4    | 88.1    | 88.1     | 88.1     | 88.1     | 88.1     | 88.4     | 88.7     | 88.7     |
| GE 700          | 82.2                        | 82.2    | 82.2    | 83.6    | 86.3    | 86.3    | 86.7    | 87.4    | 88.1    | 88.1     | 88.1     | 88.1     | 88.1     | 88.4     | 88.7     | 88.7     |
| GE 600          | 82.2                        | 82.2    | 82.2    | 83.6    | 86.3    | 86.3    | 86.7    | 87.4    | 88.1    | 88.1     | 88.1     | 88.1     | 88.1     | 88.4     | 88.7     | 88.7     |
| GE 500          | 82.2                        | 82.2    | 82.2    | 83.6    | 86.3    | 86.3    | 86.7    | 87.4    | 88.1    | 88.1     | 88.1     | 88.1     | 88.1     | 88.4     | 88.7     | 88.7     |
| GE 400          | 82.2                        | 82.2    | 82.2    | 83.6    | 86.3    | 86.3    | 86.7    | 87.4    | 88.1    | 88.1     | 88.1     | 88.1     | 88.1     | 88.4     | 88.7     | 88.7     |
| GE 300          | 82.2                        | 82.2    | 82.2    | 83.6    | 86.3    | 86.3    | 86.7    | 87.4    | 88.1    | 88.1     | 88.1     | 88.1     | 88.1     | 88.4     | 88.7     | 88.7     |
| GE 200          | 82.2                        | 82.2    | 82.2    | 83.6    | 86.3    | 86.3    | 86.7    | 87.4    | 88.1    | 88.1     | 88.1     | 88.1     | 88.1     | 88.4     | 88.7     | 88.7     |
| GE 100          | 82.2                        | 82.2    | 82.2    | 83.6    | 86.3    | 86.3    | 86.7    | 87.4    | 88.1    | 88.1     | 88.1     | 88.1     | 88.1     | 88.4     | 88.7     | 88.7     |
| GE 2000         | 82.2                        | 82.2    | 82.2    | 83.6    | 86.3    | 86.3    | 86.7    | 87.4    | 88.1    | 88.1     | 88.1     | 88.1     | 88.1     | 88.4     | 88.7     | 88.7     |
| GE 1800         | 82.2                        | 82.2    | 82.2    | 83.6    | 86.3    | 86.3    | 86.7    | 87.4    | 88.1    | 88.1     | 88.1     | 88.1     | 88.1     | 88.4     | 88.7     | 88.7     |
| GE 1600         | 82.2                        | 82.2    | 82.2    | 83.6    | 86.3    | 86.3    | 86.7    | 87.4    | 88.1    | 88.1     | 88.1     | 88.1     | 88.1     | 88.4     | 88.7     | 88.7     |
| GE 1400         | 82.2                        | 82.2    | 82.2    | 83.6    | 86.3    | 86.3    | 86.7    | 87.4    | 88.1    | 88.1     | 88.1     | 88.1     | 88.1     | 88.4     | 88.7     | 88.7     |
| GE 1200         | 82.2                        | 82.2    | 82.2    | 83.6    | 86.3    | 86.3    | 86.7    | 87.4    | 88.1    | 88.1     | 88.1     | 88.1     | 88.1     | 88.4     | 88.7     | 88.7     |
| GE 1000         | 82.2                        | 82.2    | 82.2    | 83.6    | 86.3    | 86.3    | 86.7    | 87.4    | 88.1    | 88.1     | 88.1     | 88.1     | 88.1     | 88.4     | 88.7     | 88.7     |
| GE 900          | 82.2                        | 82.2    | 82.2    | 83.6    | 86.3    | 86.3    | 86.7    | 87.4    | 88.1    | 88.1     | 88.1     | 88.1     | 88.1     | 88.4     | 88.7     | 88.7     |
| GE 800          | 82.2                        | 82.2    | 82.2    | 83.6    | 86.3    | 86.3    | 86.7    | 87.4    | 88.1    | 88.1     | 88.1     | 88.1     | 88.1     | 88.4     | 88.7     | 88.7     |
| GE 700          | 82.2                        | 82.2    | 82.2    | 83.6    | 86.3    | 86.3    | 86.7    | 87.4    | 88.1    | 88.1     | 88.1     | 88.1     | 88.1     | 88.4     | 88.7     | 88.7     |
| GE 600          | 82.2                        | 82.2    | 82.2    | 83.6    | 86.3    | 86.3    | 86.7    | 87.4    | 88.1    | 88.1     | 88.1     | 88.1     | 88.1     | 88.4     | 88.7     | 88.7     |
| GE 500          | 82.2                        | 82.2    | 82.2    | 83.6    | 86.3    | 86.3    | 86.7    | 87.4    | 88.1    | 88.1     | 88.1     | 88.1     | 88.1     | 88.4     | 88.7     | 88.7     |
| GE 400          | 82.2                        | 82.2    | 82.2    | 83.6    | 86.3    | 86.3    | 86.7    | 87.4    | 88.1    | 88.1     | 88.1     | 88.1     | 88.1     | 88.4     | 88.7     | 88.7     |
| GE 300          | 82.2                        | 82.2    | 82.2    | 83.6    | 86.3    | 86.3    | 86.7    | 87.4    | 88.1    | 88.1     | 88.1     | 88.1     | 88.1     | 88.4     | 88.7     | 88.7     |
| GE 200          | 82.2                        | 82.2    | 82.2    | 83.6    | 86.3    | 86.3    | 86.7    | 87.4    | 88.1    | 88.1     | 88.1     | 88.1     | 88.1     | 88.4     | 88.7     | 88.7     |
| GE 100          | 82.2                        | 82.2    | 82.2    | 83.6    | 86.3    | 86.3    | 86.7    | 87.4    | 88.1    | 88.1     | 88.1     | 88.1     | 88.1     | 88.4     | 88.7     | 88.7     |

TOTAL NUMBER OF OBSERVATIONS: 272

GLOBAL CLIMATOLOGY BRANCH  
USAF/ETAC  
AIR WEATHER SERVICE/MAL

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM FOURLY OBSERVATIONS

STATION NUMBER: 275007 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: APR HOURS (LST): ALL

| CEILING<br>IN<br>FEET | VISIBILITY IN STATUTE MILES |             |         |             |         |             |         |             |         |             |         |             |         |             |         |             |
|-----------------------|-----------------------------|-------------|---------|-------------|---------|-------------|---------|-------------|---------|-------------|---------|-------------|---------|-------------|---------|-------------|
|                       | GE<br>1                     | GE<br>1 1/2 | GE<br>2 | GE<br>2 1/2 | GE<br>3 | GE<br>3 1/2 | GE<br>4 | GE<br>4 1/2 | GE<br>5 | GE<br>5 1/2 | GE<br>6 | GE<br>6 1/2 | GE<br>7 | GE<br>7 1/2 | GE<br>8 | GE<br>8 1/2 |
| NO CEIL               | 4.5                         | 41.5        | 41.5    | 41.5        | 42.4    | 42.1        | 43.1    | 43.5        | 43.6    | 43.7        | 43.8    | 43.8        | 43.9    | 44.0        | 44.0    | 44.1        |
| GE 2000               | 4.5                         | 45.4        | 45.4    | 46.3        | 47.0    | 47.7        | 47.7    | 48.1        | 48.2    | 48.3        | 48.4    | 48.5        | 48.5    | 48.7        | 48.7    | 48.8        |
| GE 1800               | 4.5                         | 45.4        | 45.4    | 46.3        | 47.0    | 47.7        | 47.7    | 48.1        | 48.2    | 48.3        | 48.4    | 48.5        | 48.5    | 48.7        | 48.7    | 48.8        |
| GE 1600               | 4.5                         | 45.4        | 45.4    | 46.3        | 47.0    | 47.7        | 47.7    | 48.1        | 48.2    | 48.3        | 48.4    | 48.5        | 48.5    | 48.7        | 48.7    | 48.8        |
| GE 1400               | 4.5                         | 45.4        | 45.4    | 46.3        | 47.0    | 47.7        | 47.7    | 48.1        | 48.2    | 48.3        | 48.4    | 48.5        | 48.5    | 48.7        | 48.7    | 48.8        |
| GE 1200               | 4.5                         | 45.4        | 45.4    | 46.3        | 47.0    | 47.7        | 47.7    | 48.1        | 48.2    | 48.3        | 48.4    | 48.5        | 48.5    | 48.7        | 48.7    | 48.8        |
| GE 1000               | 4.6                         | 63.2        | 63.2    | 63.6        | 65.3    | 66.8        | 66.8    | 67.4        | 67.4    | 68.1        | 68.1    | 68.4        | 68.6    | 68.8        | 68.8    | 68.9        |
| GE 900                | 4.6                         | 63.2        | 63.2    | 63.6        | 65.3    | 66.8        | 66.8    | 67.4        | 67.4    | 68.1        | 68.1    | 68.4        | 68.6    | 68.8        | 68.8    | 68.9        |
| GE 800                | 4.6                         | 63.2        | 63.2    | 63.6        | 65.3    | 66.8        | 66.8    | 67.4        | 67.4    | 68.1        | 68.1    | 68.4        | 68.6    | 68.8        | 68.8    | 68.9        |
| GE 700                | 4.6                         | 63.2        | 63.2    | 63.6        | 65.3    | 66.8        | 66.8    | 67.4        | 67.4    | 68.1        | 68.1    | 68.4        | 68.6    | 68.8        | 68.8    | 68.9        |
| GE 600                | 4.6                         | 63.2        | 63.2    | 63.6        | 65.3    | 66.8        | 66.8    | 67.4        | 67.4    | 68.1        | 68.1    | 68.4        | 68.6    | 68.8        | 68.8    | 68.9        |
| GE 500                | 4.6                         | 65.6        | 65.6    | 66.3        | 67.6    | 69.2        | 69.2    | 70.3        | 70.3    | 70.7        | 70.8    | 71.0        | 71.2    | 71.4        | 71.4    | 71.5        |
| GE 450                | 4.6                         | 65.6        | 65.6    | 66.3        | 67.6    | 69.2        | 69.2    | 70.3        | 70.3    | 70.7        | 70.8    | 71.0        | 71.2    | 71.4        | 71.4    | 71.5        |
| GE 400                | 4.6                         | 65.6        | 65.6    | 66.3        | 67.6    | 69.2        | 69.2    | 70.3        | 70.3    | 70.7        | 70.8    | 71.0        | 71.2    | 71.4        | 71.4    | 71.5        |
| GE 350                | 4.6                         | 65.6        | 65.6    | 66.3        | 67.6    | 69.2        | 69.2    | 70.3        | 70.3    | 70.7        | 70.8    | 71.0        | 71.2    | 71.4        | 71.4    | 71.5        |
| GE 300                | 4.6                         | 65.6        | 65.6    | 66.3        | 67.6    | 69.2        | 69.2    | 70.3        | 70.3    | 70.7        | 70.8    | 71.0        | 71.2    | 71.4        | 71.4    | 71.5        |
| GE 250                | 4.6                         | 65.6        | 65.6    | 66.3        | 67.6    | 69.2        | 69.2    | 70.3        | 70.3    | 70.7        | 70.8    | 71.0        | 71.2    | 71.4        | 71.4    | 71.5        |
| GE 200                | 4.6                         | 65.6        | 65.6    | 66.3        | 67.6    | 69.2        | 69.2    | 70.3        | 70.3    | 70.7        | 70.8    | 71.0        | 71.2    | 71.4        | 71.4    | 71.5        |
| GE 150                | 4.6                         | 65.6        | 65.6    | 66.3        | 67.6    | 69.2        | 69.2    | 70.3        | 70.3    | 70.7        | 70.8    | 71.0        | 71.2    | 71.4        | 71.4    | 71.5        |
| GE 100                | 4.6                         | 65.6        | 65.6    | 66.3        | 67.6    | 69.2        | 69.2    | 70.3        | 70.3    | 70.7        | 70.8    | 71.0        | 71.2    | 71.4        | 71.4    | 71.5        |
| GE 50                 | 4.6                         | 65.6        | 65.6    | 66.3        | 67.6    | 69.2        | 69.2    | 70.3        | 70.3    | 70.7        | 70.8    | 71.0        | 71.2    | 71.4        | 71.4    | 71.5        |
| GE 0                  | 4.6                         | 65.6        | 65.6    | 66.3        | 67.6    | 69.2        | 69.2    | 70.3        | 70.3    | 70.7        | 70.8    | 71.0        | 71.2    | 71.4        | 71.4    | 71.5        |

TOTAL NUMBER OF OBSERVATIONS: 2279

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

PERIOD OF RECORD: 79-87  
MONTH: MAY HOURS(LST): 0000-0200

| CEILING                                                |     | VISIBILITY IN STATUTE MILES |        |        |        |      |      |       |       |       |        |        |        |         |         |         |      |
|--------------------------------------------------------|-----|-----------------------------|--------|--------|--------|------|------|-------|-------|-------|--------|--------|--------|---------|---------|---------|------|
| IN FEET                                                | 10' | 5'                          | 2 1/2' | 1 1/4' | 3/8'   | 1/4' | 1/8' | 1/16' | 1/32' | 1/64' | 1/128' | 1/256' | 1/512' | 1/1024' | 1/2048' | 1/4096' |      |
| NO CEIL                                                | 1   | 59.4                        | 54.4   | 50.4   | 53.4   | 59.7 | 59.7 | 59.7  | 59.7  | 59.7  | 59.7   | 59.7   | 59.7   | 59.7    | 60.1    | 60.1    | 60.1 |
| GE 10000'                                              |     | 57.7                        | 52.7   | 48.7   | 51.7   | 62.1 | 62.1 | 62.1  | 62.1  | 62.1  | 62.1   | 62.1   | 62.1   | 62.1    | 62.4    | 62.4    | 62.4 |
| GE 8000'                                               |     | 57.7                        | 52.7   | 48.7   | 51.7   | 62.1 | 62.1 | 62.1  | 62.1  | 62.1  | 62.1   | 62.1   | 62.1   | 62.1    | 62.4    | 62.4    | 62.4 |
| GE 6000'                                               |     | 57.7                        | 52.7   | 48.7   | 51.7   | 62.1 | 62.1 | 62.1  | 62.1  | 62.1  | 62.1   | 62.1   | 62.1   | 62.1    | 62.4    | 62.4    | 62.4 |
| GE 4000'                                               |     | 57.7                        | 52.7   | 48.7   | 51.7   | 62.1 | 62.1 | 62.1  | 62.1  | 62.1  | 62.1   | 62.1   | 62.1   | 62.1    | 62.4    | 62.4    | 62.4 |
| GE 2000'                                               |     | 57.7                        | 52.7   | 48.7   | 51.7   | 62.1 | 62.1 | 62.1  | 62.1  | 62.1  | 62.1   | 62.1   | 62.1   | 62.1    | 62.4    | 62.4    | 62.4 |
| GE 1000'                                               |     | 57.7                        | 52.7   | 48.7   | 51.7   | 62.1 | 62.1 | 62.1  | 62.1  | 62.1  | 62.1   | 62.1   | 62.1   | 62.1    | 62.4    | 62.4    | 62.4 |
| GE 500'                                                |     | 57.7                        | 52.7   | 48.7   | 51.7   | 62.1 | 62.1 | 62.1  | 62.1  | 62.1  | 62.1   | 62.1   | 62.1   | 62.1    | 62.4    | 62.4    | 62.4 |
| GE 250'                                                |     | 57.7                        | 52.7   | 48.7   | 51.7   | 62.1 | 62.1 | 62.1  | 62.1  | 62.1  | 62.1   | 62.1   | 62.1   | 62.1    | 62.4    | 62.4    | 62.4 |
| GE 125'                                                |     | 57.7                        | 52.7   | 48.7   | 51.7   | 62.1 | 62.1 | 62.1  | 62.1  | 62.1  | 62.1   | 62.1   | 62.1   | 62.1    | 62.4    | 62.4    | 62.4 |
| GE 62.5'                                               |     | 57.7                        | 52.7   | 48.7   | 51.7   | 62.1 | 62.1 | 62.1  | 62.1  | 62.1  | 62.1   | 62.1   | 62.1   | 62.1    | 62.4    | 62.4    | 62.4 |
| GE 31.25'                                              |     | 57.7                        | 52.7   | 48.7   | 51.7   | 62.1 | 62.1 | 62.1  | 62.1  | 62.1  | 62.1   | 62.1   | 62.1   | 62.1    | 62.4    | 62.4    | 62.4 |
| GE 15.625'                                             |     | 57.7                        | 52.7   | 48.7   | 51.7   | 62.1 | 62.1 | 62.1  | 62.1  | 62.1  | 62.1   | 62.1   | 62.1   | 62.1    | 62.4    | 62.4    | 62.4 |
| GE 7.8125'                                             |     | 57.7                        | 52.7   | 48.7   | 51.7   | 62.1 | 62.1 | 62.1  | 62.1  | 62.1  | 62.1   | 62.1   | 62.1   | 62.1    | 62.4    | 62.4    | 62.4 |
| GE 3.90625'                                            |     | 57.7                        | 52.7   | 48.7   | 51.7   | 62.1 | 62.1 | 62.1  | 62.1  | 62.1  | 62.1   | 62.1   | 62.1   | 62.1    | 62.4    | 62.4    | 62.4 |
| GE 1.953125'                                           |     | 57.7                        | 52.7   | 48.7   | 51.7   | 62.1 | 62.1 | 62.1  | 62.1  | 62.1  | 62.1   | 62.1   | 62.1   | 62.1    | 62.4    | 62.4    | 62.4 |
| GE .9765625'                                           |     | 57.7                        | 52.7   | 48.7   | 51.7   | 62.1 | 62.1 | 62.1  | 62.1  | 62.1  | 62.1   | 62.1   | 62.1   | 62.1    | 62.4    | 62.4    | 62.4 |
| GE .48828125'                                          |     | 57.7                        | 52.7   | 48.7   | 51.7   | 62.1 | 62.1 | 62.1  | 62.1  | 62.1  | 62.1   | 62.1   | 62.1   | 62.1    | 62.4    | 62.4    | 62.4 |
| GE .244140625'                                         |     | 57.7                        | 52.7   | 48.7   | 51.7   | 62.1 | 62.1 | 62.1  | 62.1  | 62.1  | 62.1   | 62.1   | 62.1   | 62.1    | 62.4    | 62.4    | 62.4 |
| GE .1220703125'                                        |     | 57.7                        | 52.7   | 48.7   | 51.7   | 62.1 | 62.1 | 62.1  | 62.1  | 62.1  | 62.1   | 62.1   | 62.1   | 62.1    | 62.4    | 62.4    | 62.4 |
| GE .06103515625'                                       |     | 57.7                        | 52.7   | 48.7   | 51.7   | 62.1 | 62.1 | 62.1  | 62.1  | 62.1  | 62.1   | 62.1   | 62.1   | 62.1    | 62.4    | 62.4    | 62.4 |
| GE .030517578125'                                      |     | 57.7                        | 52.7   | 48.7   | 51.7   | 62.1 | 62.1 | 62.1  | 62.1  | 62.1  | 62.1   | 62.1   | 62.1   | 62.1    | 62.4    | 62.4    | 62.4 |
| GE .0152587890625'                                     |     | 57.7                        | 52.7   | 48.7   | 51.7   | 62.1 | 62.1 | 62.1  | 62.1  | 62.1  | 62.1   | 62.1   | 62.1   | 62.1    | 62.4    | 62.4    | 62.4 |
| GE .00762939453125'                                    |     | 57.7                        | 52.7   | 48.7   | 51.7   | 62.1 | 62.1 | 62.1  | 62.1  | 62.1  | 62.1   | 62.1   | 62.1   | 62.1    | 62.4    | 62.4    | 62.4 |
| GE .003814697265625'                                   |     | 57.7                        | 52.7   | 48.7   | 51.7   | 62.1 | 62.1 | 62.1  | 62.1  | 62.1  | 62.1   | 62.1   | 62.1   | 62.1    | 62.4    | 62.4    | 62.4 |
| GE .0019073486328125'                                  |     | 57.7                        | 52.7   | 48.7   | 51.7   | 62.1 | 62.1 | 62.1  | 62.1  | 62.1  | 62.1   | 62.1   | 62.1   | 62.1    | 62.4    | 62.4    | 62.4 |
| GE .00095367431640625'                                 |     | 57.7                        | 52.7   | 48.7   | 51.7   | 62.1 | 62.1 | 62.1  | 62.1  | 62.1  | 62.1   | 62.1   | 62.1   | 62.1    | 62.4    | 62.4    | 62.4 |
| GE .000476837158203125'                                |     | 57.7                        | 52.7   | 48.7   | 51.7   | 62.1 | 62.1 | 62.1  | 62.1  | 62.1  | 62.1   | 62.1   | 62.1   | 62.1    | 62.4    | 62.4    | 62.4 |
| GE .0002384185791015625'                               |     | 57.7                        | 52.7   | 48.7   | 51.7   | 62.1 | 62.1 | 62.1  | 62.1  | 62.1  | 62.1   | 62.1   | 62.1   | 62.1    | 62.4    | 62.4    | 62.4 |
| GE .00011920928955078125'                              |     | 57.7                        | 52.7   | 48.7   | 51.7   | 62.1 | 62.1 | 62.1  | 62.1  | 62.1  | 62.1   | 62.1   | 62.1   | 62.1    | 62.4    | 62.4    | 62.4 |
| GE .000059604644775390625'                             |     | 57.7                        | 52.7   | 48.7   | 51.7   | 62.1 | 62.1 | 62.1  | 62.1  | 62.1  | 62.1   | 62.1   | 62.1   | 62.1    | 62.4    | 62.4    | 62.4 |
| GE .0000298023223876953125'                            |     | 57.7                        | 52.7   | 48.7   | 51.7   | 62.1 | 62.1 | 62.1  | 62.1  | 62.1  | 62.1   | 62.1   | 62.1   | 62.1    | 62.4    | 62.4    | 62.4 |
| GE .00001490116119384765625'                           |     | 57.7                        | 52.7   | 48.7   | 51.7   | 62.1 | 62.1 | 62.1  | 62.1  | 62.1  | 62.1   | 62.1   | 62.1   | 62.1    | 62.4    | 62.4    | 62.4 |
| GE .000007450580596923828125'                          |     | 57.7                        | 52.7   | 48.7   | 51.7   | 62.1 | 62.1 | 62.1  | 62.1  | 62.1  | 62.1   | 62.1   | 62.1   | 62.1    | 62.4    | 62.4    | 62.4 |
| GE .0000037252902984619140625'                         |     | 57.7                        | 52.7   | 48.7   | 51.7   | 62.1 | 62.1 | 62.1  | 62.1  | 62.1  | 62.1   | 62.1   | 62.1   | 62.1    | 62.4    | 62.4    | 62.4 |
| GE .00000186264514923095703125'                        |     | 57.7                        | 52.7   | 48.7   | 51.7   | 62.1 | 62.1 | 62.1  | 62.1  | 62.1  | 62.1   | 62.1   | 62.1   | 62.1    | 62.4    | 62.4    | 62.4 |
| GE .000000931322574615478515625'                       |     | 57.7                        | 52.7   | 48.7   | 51.7   | 62.1 | 62.1 | 62.1  | 62.1  | 62.1  | 62.1   | 62.1   | 62.1   | 62.1    | 62.4    | 62.4    | 62.4 |
| GE .0000004656612873077392578125'                      |     | 57.7                        | 52.7   | 48.7   | 51.7   | 62.1 | 62.1 | 62.1  | 62.1  | 62.1  | 62.1   | 62.1   | 62.1   | 62.1    | 62.4    | 62.4    | 62.4 |
| GE .00000023283064365386962890625'                     |     | 57.7                        | 52.7   | 48.7   | 51.7   | 62.1 | 62.1 | 62.1  | 62.1  | 62.1  | 62.1   | 62.1   | 62.1   | 62.1    | 62.4    | 62.4    | 62.4 |
| GE .000000116415321826934814453125'                    |     | 57.7                        | 52.7   | 48.7   | 51.7   | 62.1 | 62.1 | 62.1  | 62.1  | 62.1  | 62.1   | 62.1   | 62.1   | 62.1    | 62.4    | 62.4    | 62.4 |
| GE .0000000582076609134674072265625'                   |     | 57.7                        | 52.7   | 48.7   | 51.7   | 62.1 | 62.1 | 62.1  | 62.1  | 62.1  | 62.1   | 62.1   | 62.1   | 62.1    | 62.4    | 62.4    | 62.4 |
| GE .00000002910383045673370361328125'                  |     | 57.7                        | 52.7   | 48.7   | 51.7   | 62.1 | 62.1 | 62.1  | 62.1  | 62.1  | 62.1   | 62.1   | 62.1   | 62.1    | 62.4    | 62.4    | 62.4 |
| GE .000000014551915228366851806640625'                 |     | 57.7                        | 52.7   | 48.7   | 51.7   | 62.1 | 62.1 | 62.1  | 62.1  | 62.1  | 62.1   | 62.1   | 62.1   | 62.1    | 62.4    | 62.4    | 62.4 |
| GE .0000000072759576141834259033203125'                |     | 57.7                        | 52.7   | 48.7   | 51.7   | 62.1 | 62.1 | 62.1  | 62.1  | 62.1  | 62.1   | 62.1   | 62.1   | 62.1    | 62.4    | 62.4    | 62.4 |
| GE .00000000363797880709171295166015625'               |     | 57.7                        | 52.7   | 48.7   | 51.7   | 62.1 | 62.1 | 62.1  | 62.1  | 62.1  | 62.1   | 62.1   | 62.1   | 62.1    | 62.4    | 62.4    | 62.4 |
| GE .000000001818989403545856475830078125'              |     | 57.7                        | 52.7   | 48.7   | 51.7   | 62.1 | 62.1 | 62.1  | 62.1  | 62.1  | 62.1   | 62.1   | 62.1   | 62.1    | 62.4    | 62.4    | 62.4 |
| GE .0000000009094947017729282379150390625'             |     | 57.7                        | 52.7   | 48.7   | 51.7   | 62.1 | 62.1 | 62.1  | 62.1  | 62.1  | 62.1   | 62.1   | 62.1   | 62.1    | 62.4    | 62.4    | 62.4 |
| GE .00000000045474735088646411895751953125'            |     | 57.7                        | 52.7   | 48.7   | 51.7   | 62.1 | 62.1 | 62.1  | 62.1  | 62.1  | 62.1   | 62.1   | 62.1   | 62.1    | 62.4    | 62.4    | 62.4 |
| GE .000000000227373675443232059478759765625'           |     | 57.7                        | 52.7   | 48.7   | 51.7   | 62.1 | 62.1 | 62.1  | 62.1  | 62.1  | 62.1   | 62.1   | 62.1   | 62.1    | 62.4    | 62.4    | 62.4 |
| GE .0000000001136868377216160297393798828125'          |     | 57.7                        | 52.7   | 48.7   | 51.7   | 62.1 | 62.1 | 62.1  | 62.1  | 62.1  | 62.1   | 62.1   | 62.1   | 62.1    | 62.4    | 62.4    | 62.4 |
| GE .00000000005684341886080801486968994140625'         |     | 57.7                        | 52.7   | 48.7   | 51.7   | 62.1 | 62.1 | 62.1  | 62.1  | 62.1  | 62.1   | 62.1   | 62.1   | 62.1    | 62.4    | 62.4    | 62.4 |
| GE .000000000028421709430404007434844970703125'        |     | 57.7                        | 52.7   | 48.7   | 51.7   | 62.1 | 62.1 | 62.1  | 62.1  | 62.1  | 62.1   | 62.1   | 62.1   | 62.1    | 62.4    | 62.4    | 62.4 |
| GE .0000000000142108547152020037174224853515625'       |     | 57.7                        | 52.7   | 48.7   | 51.7   | 62.1 | 62.1 | 62.1  | 62.1  | 62.1  | 62.1   | 62.1   | 62.1   | 62.1    | 62.4    | 62.4    | 62.4 |
| GE .00000000000710542735760100185871124267578125'      |     | 57.7                        | 52.7   | 48.7   | 51.7   | 62.1 | 62.1 | 62.1  | 62.1  | 62.1  | 62.1   | 62.1   | 62.1   | 62.1    | 62.4    | 62.4    | 62.4 |
| GE .000000000003552713678800500929355621337890625'     |     | 57.7                        | 52.7   | 48.7   | 51.7   | 62.1 | 62.1 | 62.1  | 62.1  | 62.1  | 62.1   | 62.1   | 62.1   | 62.1    | 62.4    | 62.4    | 62.4 |
| GE .0000000000017763568394002500464678106689453125'    |     | 57.7                        | 52.7   | 48.7   | 51.7   | 62.1 | 62.1 | 62.1  | 62.1  | 62.1  | 62.1   | 62.1   | 62.1   | 62.1    | 62.4    | 62.4    | 62.4 |
| GE .00000000000088817841970012502323390553447265625'   |     | 57.7                        | 52.7   | 48.7   | 51.7   | 62.1 | 62.1 | 62.1  | 62.1  | 62.1  | 62.1   | 62.1   | 62.1   | 62.1    | 62.4    | 62.4    | 62.4 |
| GE .000000000000444089209850062511616952767236328125'  |     | 57.7                        | 52.7   | 48.7   | 51.7   | 62.1 | 62.1 | 62.1  | 62.1  | 62.1  | 62.1   | 62.1   | 62.1   | 62.1    | 62.4    | 62.4    | 62.4 |
| GE .000000000000222044604925031255808476383616640625'  |     | 57.7                        | 52.7   | 48.7   | 51.7   | 62.1 | 62.1 | 62.1  | 62.1  | 62.1  | 62.1   | 62.1   | 62.1   | 62.1    | 62.4    | 62.4    | 62.4 |
| GE .0000000000001110223024625157940423691818203125'    |     | 57.7                        | 52.7   | 48.7   | 51.7   | 62.1 | 62.1 | 62.1  | 62.1  | 62.1  | 62.1   | 62.1   | 62.1   | 62.1    | 62.4    | 62.4    | 62.4 |
| GE .0000000000000555111512312897020211809091015625'    |     | 57.7                        | 52.7   | 48.7   | 51.7   | 62.1 | 62.1 | 62.1  | 62.1  | 62.1  | 62.1   | 62.1   | 62.1   | 62.1    | 62.4    | 62.4    | 62.4 |
| GE .0000000000000277555756156144851005904545578125'    |     | 57.7                        | 52.7   | 48.7   | 51.7   | 62.1 | 62.1 | 62.1  | 62.1  | 62.1  | 62.1   | 62.1   | 62.1   | 62.1    | 62.4    | 62.4    | 62.4 |
| GE .0000000000000138777878078072425525472727890625'    |     | 57.7                        | 52.7   | 48.7   | 51.7   | 62.1 | 62.1 | 62.1  | 62.1  | 62.1  | 62.1   | 62.1   | 62.1   | 62.1    | 62.4    | 62.4    | 62.4 |
| GE .00000000000000693889390390362127627363639453125'   |     | 57.7                        | 52.7   | 48.7   | 51.7   | 62.1 | 62.1 | 62.1  | 62.1  | 62.1  | 62.1   | 62.1   | 62.1   | 62.1    | 62.4    | 62.4    | 62.4 |
| GE .000000000000003469446951951810638136818182265625'  |     | 57.7                        | 52.7   | 48.7   | 51.7   | 62.1 | 62.1 | 62.1  | 62.1  | 62.1  | 62.1   | 62.1   | 62.1   | 62.1    | 62.4    | 62.4    | 62.4 |
| GE .0000000000000017347234759759053190684090911328125' |     | 57.7                        | 52.7   | 48.7   | 51.7   | 62.1 | 62.1 | 62.1  | 62.1  | 62.1  | 62.1   | 62.1   | 62.1   | 62.1    | 62.4    | 62.4    | 62.4 |
| GE .000000000000000867361737987952659534204546640625'  |     | 57.7                        | 52.7   | 48.7   | 51.7</ |      |      |       |       |       |        |        |        |         |         |         |      |

TOTAL NUMBER OF OBSERVATIONS: 210

GLOBAL CLIMATOLOGY BRANCH  
USAF/ETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 27545 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 76-87  
MONTH: MAY HOURS/LSST: 0300-0500

| CEILING<br>IN<br>FEET | GE<br>1 | GE<br>10 | GE<br>15 | GE<br>20 | GE<br>25 | GE<br>30 | GE<br>35 | GE<br>40 | GE<br>45 | GE<br>50 | GE<br>55 | GE<br>60 | GE<br>65 | GE<br>70 | GE<br>75 | GE<br>80 | GE<br>85 | GE<br>90 | GE<br>95 | GE<br>100 |
|-----------------------|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|
|                       |         |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |          |           |
| NO CEIL               | 1       | .2       | 53.8     | 53.8     | 53.8     | 54.2     | 56.1     | 56.1     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5      |
| GE 20000              | .3      | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5      |
| GE 18000              | .3      | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5      |
| GE 16000              | .3      | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5      |
| GE 14000              | .3      | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5      |
| GE 12000              | .3      | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5     | 56.5      |
| GE 10000              | .3      | 76.1     | 76.1     | 76.1     | 76.4     | 76.7     | 79.1     | 79.4     | 80.1     | 80.4     | 80.4     | 80.4     | 80.4     | 80.4     | 80.4     | 80.4     | 80.4     | 80.4     | 80.4     | 80.4      |
| GE 9000               | .3      | 76.1     | 76.1     | 76.1     | 76.4     | 76.7     | 79.1     | 79.4     | 80.1     | 80.4     | 80.4     | 80.4     | 80.4     | 80.4     | 80.4     | 80.4     | 80.4     | 80.4     | 80.4     | 80.4      |
| GE 8000               | .3      | 76.1     | 76.1     | 76.1     | 76.4     | 76.7     | 79.1     | 79.4     | 80.1     | 80.4     | 80.4     | 80.4     | 80.4     | 80.4     | 80.4     | 80.4     | 80.4     | 80.4     | 80.4     | 80.4      |
| GE 7000               | .3      | 76.1     | 76.1     | 76.1     | 76.4     | 76.7     | 79.1     | 79.4     | 80.1     | 80.4     | 80.4     | 80.4     | 80.4     | 80.4     | 80.4     | 80.4     | 80.4     | 80.4     | 80.4     | 80.4      |
| GE 6000               | .3      | 77.4     | 77.4     | 77.4     | 77.4     | 77.7     | 80.1     | 80.4     | 80.7     | 81.4     | 81.7     | 81.7     | 81.7     | 81.7     | 81.7     | 81.7     | 81.7     | 81.7     | 81.7     | 81.7      |
| GE 5000               | .3      | 80.7     | 80.7     | 80.7     | 81.1     | 81.7     | 84.1     | 84.4     | 85.0     | 85.4     | 85.4     | 85.4     | 85.4     | 85.4     | 85.4     | 85.4     | 85.4     | 85.4     | 85.4     | 85.4      |
| GE 4500               | .3      | 80.7     | 80.7     | 80.7     | 81.1     | 81.7     | 84.1     | 84.4     | 85.0     | 85.4     | 85.4     | 85.4     | 85.4     | 85.4     | 85.4     | 85.4     | 85.4     | 85.4     | 85.4     | 85.4      |
| GE 4000               | .3      | 83.1     | 83.1     | 83.1     | 83.4     | 83.7     | 86.1     | 86.4     | 86.7     | 87.0     | 87.4     | 87.4     | 87.4     | 87.4     | 87.4     | 87.4     | 87.4     | 87.4     | 87.4     | 87.4      |
| GE 3500               | .3      | 83.1     | 83.1     | 83.1     | 83.4     | 83.7     | 86.1     | 86.4     | 86.7     | 87.0     | 87.4     | 87.4     | 87.4     | 87.4     | 87.4     | 87.4     | 87.4     | 87.4     | 87.4     | 87.4      |
| GE 3000               | .3      | 85.4     | 85.4     | 85.4     | 85.4     | 85.7     | 88.0     | 88.4     | 88.7     | 89.0     | 89.4     | 89.4     | 89.4     | 89.4     | 89.4     | 89.4     | 89.4     | 89.4     | 89.4     | 89.4      |
| GE 2500               | .3      | 86.1     | 86.1     | 86.1     | 86.4     | 86.7     | 89.0     | 89.4     | 89.7     | 90.0     | 90.4     | 90.4     | 90.4     | 90.4     | 90.4     | 90.4     | 90.4     | 90.4     | 90.4     | 90.4      |
| GE 2000               | .3      | 87.7     | 87.7     | 87.7     | 88.0     | 88.4     | 90.7     | 91.0     | 91.4     | 91.7     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0      |
| GE 1800               | .3      | 88.4     | 88.4     | 88.4     | 88.4     | 88.4     | 90.7     | 91.0     | 91.4     | 91.7     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0      |
| GE 1600               | .3      | 88.4     | 88.4     | 88.4     | 88.4     | 88.4     | 90.7     | 91.0     | 91.4     | 91.7     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0      |
| GE 1400               | .3      | 88.4     | 88.4     | 88.4     | 88.4     | 88.4     | 90.7     | 91.0     | 91.4     | 91.7     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0      |
| GE 1200               | .3      | 88.4     | 88.4     | 88.4     | 88.4     | 88.4     | 90.7     | 91.0     | 91.4     | 91.7     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0      |
| GE 1000               | .3      | 88.4     | 88.4     | 88.4     | 88.4     | 88.4     | 90.7     | 91.0     | 91.4     | 91.7     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0      |
| GE 900                | .3      | 88.4     | 88.4     | 88.4     | 88.4     | 88.4     | 90.7     | 91.0     | 91.4     | 91.7     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0      |
| GE 800                | .3      | 88.4     | 88.4     | 88.4     | 88.4     | 88.4     | 90.7     | 91.0     | 91.4     | 91.7     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0      |
| GE 700                | .3      | 88.4     | 88.4     | 88.4     | 88.4     | 88.4     | 90.7     | 91.0     | 91.4     | 91.7     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0      |
| GE 600                | .3      | 88.4     | 88.4     | 88.4     | 88.4     | 88.4     | 90.7     | 91.0     | 91.4     | 91.7     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0      |
| GE 500                | .3      | 88.4     | 88.4     | 88.4     | 88.4     | 88.4     | 90.7     | 91.0     | 91.4     | 91.7     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0      |
| GE 400                | .3      | 88.4     | 88.4     | 88.4     | 88.4     | 88.4     | 90.7     | 91.0     | 91.4     | 91.7     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0      |
| GE 300                | .3      | 88.4     | 88.4     | 88.4     | 88.4     | 88.4     | 90.7     | 91.0     | 91.4     | 91.7     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0      |
| GE 200                | .3      | 88.4     | 88.4     | 88.4     | 88.4     | 88.4     | 90.7     | 91.0     | 91.4     | 91.7     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0      |
| GE 100                | .3      | 88.4     | 88.4     | 88.4     | 88.4     | 88.4     | 90.7     | 91.0     | 91.4     | 91.7     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0      |
| GE                    | .3      | 88.4     | 88.4     | 88.4     | 88.4     | 88.4     | 90.7     | 91.0     | 91.4     | 91.7     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0     | 92.0      |

TOTAL NUMBER OF OBSERVATIONS: 251

GLOBAL CLIMATOLOGY BRANCH  
USAF/CLTAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM FOURLY OBSERVATIONS

STATION NUMBER: 274952 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: MAY HOURS (LST): 0600-0800

| CEILING<br>IN<br>FEET | VISIBILITY IN STATUTE MILES |      |      |      |      |      |      |       |      |      |      |      |      |      |      |      |
|-----------------------|-----------------------------|------|------|------|------|------|------|-------|------|------|------|------|------|------|------|------|
|                       | GE                          | GE   | GE   | GE   | GE   | GE   | GE   | GE    | GE   | GE   | GE   | GE   | GE   | GE   | GE   | GE   |
|                       | 1                           | 1/2  | 3/4  | 1    | 1/2  | 3/4  | 1    | 1/2   | 3/4  | 1    | 1/2  | 3/4  | 1    | 1/2  | 3/4  | 1    |
| NO CLIL               | 1                           | .7   | 50.3 | 57.7 | 50.7 | 51.0 | 52.0 | 52.0  | 52.7 | 53.0 | 53.0 | 57.0 | 53.3 | 53.3 | 53.3 | 53.3 |
| GE 0000               | .7                          | 54.2 | 55.7 | 55.7 | 56.3 | 57.3 | 57.3 | 58.0  | 58.3 | 58.3 | 58.3 | 58.3 | 58.7 | 58.7 | 58.7 | 58.7 |
| GE 1000               | .7                          | 55.3 | 55.7 | 55.7 | 56.3 | 57.3 | 57.3 | 58.0  | 58.3 | 58.3 | 58.3 | 58.3 | 58.7 | 58.7 | 58.7 | 58.7 |
| GE 1500               | .7                          | 55.3 | 55.7 | 55.7 | 56.3 | 57.3 | 57.3 | 58.0  | 58.3 | 58.3 | 58.3 | 58.3 | 58.7 | 58.7 | 58.7 | 58.7 |
| GE 1900               | .7                          | 55.3 | 55.7 | 55.7 | 56.3 | 57.3 | 57.3 | 58.0  | 58.3 | 58.3 | 58.3 | 58.3 | 58.7 | 58.7 | 58.7 | 58.7 |
| GE 2300               | .7                          | 55.3 | 55.7 | 55.7 | 56.3 | 57.3 | 57.3 | 58.0  | 58.3 | 58.3 | 58.3 | 58.3 | 58.7 | 58.7 | 58.7 | 58.7 |
| GE 0000               | 1.0                         | 77.3 | 77.7 | 77.7 | 79.0 | 80.7 | 80.7 | 81.3  | 81.7 | 81.7 | 81.7 | 82.0 | 82.3 | 82.3 | 82.3 | 82.3 |
| GE 0500               | 1.0                         | 77.3 | 77.7 | 77.7 | 79.0 | 80.7 | 80.7 | 81.3  | 81.7 | 81.7 | 81.7 | 82.0 | 82.3 | 82.3 | 82.3 | 82.3 |
| GE 0900               | 1.0                         | 77.3 | 77.7 | 77.7 | 79.0 | 80.7 | 80.7 | 81.3  | 81.7 | 81.7 | 81.7 | 82.0 | 82.3 | 82.3 | 82.3 | 82.3 |
| GE 1300               | 1.0                         | 77.3 | 77.7 | 77.7 | 79.0 | 80.7 | 80.7 | 81.3  | 81.7 | 81.7 | 81.7 | 82.0 | 82.3 | 82.3 | 82.3 | 82.3 |
| GE 1700               | 1.0                         | 77.3 | 77.7 | 77.7 | 79.0 | 80.7 | 80.7 | 81.3  | 81.7 | 81.7 | 81.7 | 82.0 | 82.3 | 82.3 | 82.3 | 82.3 |
| GE 2100               | 1.0                         | 77.3 | 77.7 | 77.7 | 79.0 | 80.7 | 80.7 | 81.3  | 81.7 | 81.7 | 81.7 | 82.0 | 82.3 | 82.3 | 82.3 | 82.3 |
| GE 0000               | 1.0                         | 80.3 | 80.7 | 80.7 | 81.3 | 83.7 | 83.7 | 84.3  | 84.7 | 84.7 | 84.7 | 85.0 | 85.3 | 85.3 | 85.3 | 85.3 |
| GE 0500               | 1.0                         | 80.3 | 80.7 | 80.7 | 81.3 | 83.7 | 83.7 | 84.3  | 84.7 | 84.7 | 84.7 | 85.0 | 85.3 | 85.3 | 85.3 | 85.3 |
| GE 0900               | 1.0                         | 80.3 | 80.7 | 80.7 | 81.3 | 83.7 | 83.7 | 84.3  | 84.7 | 84.7 | 84.7 | 85.0 | 85.3 | 85.3 | 85.3 | 85.3 |
| GE 1300               | 1.0                         | 80.3 | 80.7 | 80.7 | 81.3 | 83.7 | 83.7 | 84.3  | 84.7 | 84.7 | 84.7 | 85.0 | 85.3 | 85.3 | 85.3 | 85.3 |
| GE 1700               | 1.0                         | 80.3 | 80.7 | 80.7 | 81.3 | 83.7 | 83.7 | 84.3  | 84.7 | 84.7 | 84.7 | 85.0 | 85.3 | 85.3 | 85.3 | 85.3 |
| GE 2100               | 1.0                         | 80.3 | 80.7 | 80.7 | 81.3 | 83.7 | 83.7 | 84.3  | 84.7 | 84.7 | 84.7 | 85.0 | 85.3 | 85.3 | 85.3 | 85.3 |
| GE 0000               | 1.0                         | 83.7 | 84.3 | 84.3 | 86.0 | 88.3 | 88.3 | 89.0  | 89.3 | 89.3 | 89.3 | 90.7 | 90.0 | 90.0 | 90.0 | 90.0 |
| GE 0500               | 1.0                         | 83.7 | 84.3 | 84.3 | 86.0 | 88.3 | 88.3 | 89.0  | 89.3 | 89.3 | 89.3 | 90.7 | 90.0 | 90.0 | 90.0 | 90.0 |
| GE 0900               | 1.0                         | 83.7 | 84.3 | 84.3 | 86.0 | 88.3 | 88.3 | 89.0  | 89.3 | 89.3 | 89.3 | 90.7 | 90.0 | 90.0 | 90.0 | 90.0 |
| GE 1300               | 1.0                         | 83.7 | 84.3 | 84.3 | 86.0 | 88.3 | 88.3 | 89.0  | 89.3 | 89.3 | 89.3 | 90.7 | 90.0 | 90.0 | 90.0 | 90.0 |
| GE 1700               | 1.0                         | 83.7 | 84.3 | 84.3 | 86.0 | 88.3 | 88.3 | 89.0  | 89.3 | 89.3 | 89.3 | 90.7 | 90.0 | 90.0 | 90.0 | 90.0 |
| GE 2100               | 1.0                         | 83.7 | 84.3 | 84.3 | 86.0 | 88.3 | 88.3 | 89.0  | 89.3 | 89.3 | 89.3 | 90.7 | 90.0 | 90.0 | 90.0 | 90.0 |
| GE 0000               | 1.0                         | 86.3 | 86.7 | 86.7 | 88.3 | 91.3 | 91.3 | 92.0  | 92.3 | 92.3 | 92.3 | 93.0 | 93.0 | 93.0 | 93.0 | 93.0 |
| GE 0500               | 1.0                         | 86.3 | 86.7 | 86.7 | 88.3 | 91.3 | 91.3 | 92.0  | 92.3 | 92.3 | 92.3 | 93.0 | 93.0 | 93.0 | 93.0 | 93.0 |
| GE 0900               | 1.0                         | 86.3 | 86.7 | 86.7 | 88.3 | 91.3 | 91.3 | 92.0  | 92.3 | 92.3 | 92.3 | 93.0 | 93.0 | 93.0 | 93.0 | 93.0 |
| GE 1300               | 1.0                         | 86.3 | 86.7 | 86.7 | 88.3 | 91.3 | 91.3 | 92.0  | 92.3 | 92.3 | 92.3 | 93.0 | 93.0 | 93.0 | 93.0 | 93.0 |
| GE 1700               | 1.0                         | 86.3 | 86.7 | 86.7 | 88.3 | 91.3 | 91.3 | 92.0  | 92.3 | 92.3 | 92.3 | 93.0 | 93.0 | 93.0 | 93.0 | 93.0 |
| GE 2100               | 1.0                         | 86.3 | 86.7 | 86.7 | 88.3 | 91.3 | 91.3 | 92.0  | 92.3 | 92.3 | 92.3 | 93.0 | 93.0 | 93.0 | 93.0 | 93.0 |
| GE 0000               | 1.0                         | 89.3 | 89.7 | 89.7 | 91.7 | 94.3 | 94.3 | 95.0  | 95.7 | 95.7 | 95.7 | 96.0 | 96.3 | 96.3 | 96.3 | 96.3 |
| GE 0500               | 1.0                         | 89.3 | 89.7 | 89.7 | 91.7 | 94.3 | 94.3 | 95.0  | 95.7 | 95.7 | 95.7 | 96.0 | 96.3 | 96.3 | 96.3 | 96.3 |
| GE 0900               | 1.0                         | 89.3 | 89.7 | 89.7 | 91.7 | 94.3 | 94.3 | 95.0  | 95.7 | 95.7 | 95.7 | 96.0 | 96.3 | 96.3 | 96.3 | 96.3 |
| GE 1300               | 1.0                         | 89.3 | 89.7 | 89.7 | 91.7 | 94.3 | 94.3 | 95.0  | 95.7 | 95.7 | 95.7 | 96.0 | 96.3 | 96.3 | 96.3 | 96.3 |
| GE 1700               | 1.0                         | 89.3 | 89.7 | 89.7 | 91.7 | 94.3 | 94.3 | 95.0  | 95.7 | 95.7 | 95.7 | 96.0 | 96.3 | 96.3 | 96.3 | 96.3 |
| GE 2100               | 1.0                         | 89.3 | 89.7 | 89.7 | 91.7 | 94.3 | 94.3 | 95.0  | 95.7 | 95.7 | 95.7 | 96.0 | 96.3 | 96.3 | 96.3 | 96.3 |
| GE 0000               | 1.0                         | 92.3 | 92.7 | 92.7 | 94.3 | 96.7 | 96.7 | 97.0  | 97.3 | 97.3 | 97.3 | 97.0 | 97.3 | 97.3 | 97.3 | 97.3 |
| GE 0500               | 1.0                         | 92.3 | 92.7 | 92.7 | 94.3 | 96.7 | 96.7 | 97.0  | 97.3 | 97.3 | 97.3 | 97.0 | 97.3 | 97.3 | 97.3 | 97.3 |
| GE 0900               | 1.0                         | 92.3 | 92.7 | 92.7 | 94.3 | 96.7 | 96.7 | 97.0  | 97.3 | 97.3 | 97.3 | 97.0 | 97.3 | 97.3 | 97.3 | 97.3 |
| GE 1300               | 1.0                         | 92.3 | 92.7 | 92.7 | 94.3 | 96.7 | 96.7 | 97.0  | 97.3 | 97.3 | 97.3 | 97.0 | 97.3 | 97.3 | 97.3 | 97.3 |
| GE 1700               | 1.0                         | 92.3 | 92.7 | 92.7 | 94.3 | 96.7 | 96.7 | 97.0  | 97.3 | 97.3 | 97.3 | 97.0 | 97.3 | 97.3 | 97.3 | 97.3 |
| GE 2100               | 1.0                         | 92.3 | 92.7 | 92.7 | 94.3 | 96.7 | 96.7 | 97.0  | 97.3 | 97.3 | 97.3 | 97.0 | 97.3 | 97.3 | 97.3 | 97.3 |
| GE 0000               | 1.0                         | 95.3 | 95.7 | 95.7 | 97.3 | 99.7 | 99.7 | 100.0 | 99.7 | 99.7 | 99.7 | 99.0 | 99.3 | 99.3 | 99.3 | 99.3 |
| GE 0500               | 1.0                         | 95.3 | 95.7 | 95.7 | 97.3 | 99.7 | 99.7 | 100.0 | 99.7 | 99.7 | 99.7 | 99.0 | 99.3 | 99.3 | 99.3 | 99.3 |
| GE 0900               | 1.0                         | 95.3 | 95.7 | 95.7 | 97.3 | 99.7 | 99.7 | 100.0 | 99.7 | 99.7 | 99.7 | 99.0 | 99.3 | 99.3 | 99.3 | 99.3 |
| GE 1300               | 1.0                         | 95.3 | 95.7 | 95.7 | 97.3 | 99.7 | 99.7 | 100.0 | 99.7 | 99.7 | 99.7 | 99.0 | 99.3 | 99.3 | 99.3 | 99.3 |
| GE 1700               | 1.0                         | 95.3 | 95.7 | 95.7 | 97.3 | 99.7 | 99.7 | 100.0 | 99.7 | 99.7 | 99.7 | 99.0 | 99.3 | 99.3 | 99.3 | 99.3 |
| GE 2100               | 1.0                         | 95.3 | 95.7 | 95.7 | 97.3 | 99.7 | 99.7 | 100.0 | 99.7 | 99.7 | 99.7 | 99.0 | 99.3 | 99.3 | 99.3 | 99.3 |

TOTAL NUMBER OF OBSERVATIONS: 100

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

PERIOD OF RECORD: 78-87  
MONTH: MAY HOURS (LST): 0900-1100

| CEILING  |    | VISIBILITY IN STATUTE MILES |        |        |        |        |        |        |      |          |          |          |          |      |          |      |      |
|----------|----|-----------------------------|--------|--------|--------|--------|--------|--------|------|----------|----------|----------|----------|------|----------|------|------|
| IN FEET  |    | GE 1/8                      | GE 1/4 | GE 3/8 | GE 1/2 | GE 5/8 | GE 3/4 | GE 7/8 | GE 1 | GE 1 1/8 | GE 1 1/4 | GE 1 1/2 | GE 1 3/4 | GE 2 | GE 2 1/2 | GE 3 | GE 4 |
| NO CEIL  | 1  |                             | 53.2   | 53.2   | 53.2   | 53.2   | 53.2   | 53.2   | 53.2 | 53.2     | 53.2     | 53.2     | 53.2     | 53.2 | 53.2     | 53.2 | 53.2 |
| GE 20000 | .7 |                             | 56.5   | 56.5   | 56.5   | 56.5   | 56.5   | 57.1   | 57.1 | 57.5     | 57.5     | 57.5     | 57.5     | 57.5 | 57.5     | 57.5 | 57.5 |
| GE 18000 | .7 |                             | 56.5   | 56.5   | 56.5   | 56.5   | 56.5   | 57.1   | 57.1 | 57.5     | 57.5     | 57.5     | 57.5     | 57.5 | 57.5     | 57.5 | 57.5 |
| GE 16000 | .7 |                             | 56.5   | 56.5   | 56.5   | 56.5   | 56.5   | 57.1   | 57.1 | 57.5     | 57.5     | 57.5     | 57.5     | 57.5 | 57.5     | 57.5 | 57.5 |
| GE 14000 | .3 |                             | 56.5   | 56.5   | 56.5   | 56.5   | 56.5   | 57.1   | 57.1 | 57.5     | 57.5     | 57.5     | 57.5     | 57.5 | 57.5     | 57.5 | 57.5 |
| GE 12000 | .3 |                             | 56.5   | 56.5   | 56.5   | 56.5   | 56.5   | 57.1   | 57.1 | 57.5     | 57.5     | 57.5     | 57.5     | 57.5 | 57.5     | 57.5 | 57.5 |
| GE 10000 | .3 |                             | 75.7   | 75.7   | 75.7   | 75.7   | 75.7   | 76.7   | 76.7 | 77.1     | 77.1     | 77.1     | 77.1     | 77.1 | 77.1     | 77.1 | 77.1 |
| GE 9000  | .3 |                             | 75.7   | 75.7   | 75.7   | 75.7   | 75.7   | 76.7   | 76.7 | 77.1     | 77.1     | 77.1     | 77.1     | 77.1 | 77.1     | 77.1 | 77.1 |
| GE 8000  | .2 |                             | 75.7   | 75.7   | 75.7   | 75.7   | 75.7   | 76.7   | 76.7 | 77.1     | 77.1     | 77.1     | 77.1     | 77.1 | 77.1     | 77.1 | 77.1 |
| GE 7000  | .3 |                             | 76.4   | 76.4   | 76.4   | 76.4   | 76.4   | 77.4   | 77.4 | 77.7     | 77.7     | 77.7     | 77.7     | 77.7 | 77.7     | 77.7 | 77.7 |
| GE 6000  | .3 |                             | 76.7   | 76.7   | 76.7   | 76.7   | 76.7   | 77.7   | 77.7 | 78.1     | 78.1     | 78.1     | 78.1     | 78.1 | 78.1     | 78.1 | 78.1 |
| GE 5000  | .3 |                             | 79.7   | 79.7   | 79.7   | 79.7   | 79.7   | 80.7   | 80.7 | 81.1     | 81.1     | 81.1     | 81.1     | 81.1 | 81.1     | 81.1 | 81.1 |
| GE 4500  | .3 |                             | 81.1   | 81.1   | 81.1   | 81.1   | 81.1   | 81.1   | 81.4 | 81.4     | 81.4     | 81.4     | 81.4     | 81.4 | 81.4     | 81.4 | 81.4 |
| GE 4000  | .3 |                             | 82.1   | 82.1   | 82.1   | 82.1   | 82.1   | 83.1   | 83.1 | 83.4     | 83.4     | 83.4     | 83.4     | 83.4 | 83.4     | 83.4 | 83.4 |
| GE 3500  | .3 |                             | 82.7   | 82.7   | 82.7   | 82.7   | 82.7   | 83.7   | 83.7 | 84.1     | 84.1     | 84.1     | 84.1     | 84.1 | 84.1     | 84.1 | 84.1 |
| GE 3000  | .3 |                             | 84.1   | 84.1   | 84.1   | 84.1   | 84.1   | 85.1   | 85.1 | 85.4     | 85.4     | 85.4     | 85.4     | 85.4 | 85.4     | 85.4 | 85.4 |
| GE 2500  | .7 |                             | 87.4   | 87.4   | 87.4   | 87.4   | 87.4   | 88.4   | 88.4 | 88.7     | 88.7     | 88.7     | 88.7     | 88.7 | 88.7     | 88.7 | 88.7 |
| GE 2000  | .3 |                             | 89.7   | 89.7   | 89.7   | 89.7   | 89.7   | 90.0   | 90.0 | 90.4     | 90.4     | 90.4     | 90.4     | 90.4 | 90.4     | 90.4 | 90.4 |
| GE 1800  | .3 |                             | 90.7   | 90.7   | 90.7   | 90.7   | 90.7   | 91.7   | 91.7 | 92.0     | 92.0     | 92.0     | 92.0     | 92.0 | 92.0     | 92.0 | 92.0 |
| GE 1600  | .3 |                             | 91.4   | 91.4   | 91.4   | 91.4   | 91.4   | 92.7   | 92.7 | 93.0     | 93.0     | 93.0     | 93.0     | 93.0 | 93.0     | 93.0 | 93.0 |
| GE 1400  | .3 |                             | 92.7   | 92.7   | 92.7   | 92.7   | 92.7   | 93.0   | 93.0 | 94.4     | 94.4     | 94.4     | 94.4     | 94.4 | 94.4     | 94.4 | 94.4 |
| GE 1200  | .7 |                             | 94.7   | 94.7   | 94.7   | 94.7   | 94.7   | 95.0   | 95.0 | 96.3     | 96.3     | 96.3     | 96.3     | 96.3 | 96.3     | 96.3 | 96.3 |
| GE 1000  | .7 |                             | 95.3   | 95.3   | 95.3   | 95.3   | 95.7   | 96.7   | 96.7 | 97.0     | 97.0     | 97.0     | 97.0     | 97.0 | 97.0     | 97.0 | 97.0 |
| GE 800   | .3 |                             | 95.3   | 95.3   | 95.3   | 95.7   | 96.7   | 97.0   | 97.0 | 97.3     | 97.3     | 97.3     | 97.3     | 97.3 | 97.3     | 97.3 | 97.3 |
| GE 700   | .3 |                             | 95.7   | 95.7   | 95.7   | 95.7   | 96.0   | 97.3   | 97.3 | 97.7     | 97.7     | 97.7     | 97.7     | 97.7 | 97.7     | 97.7 | 97.7 |
| GE 600   | .3 |                             | 96.0   | 96.0   | 96.0   | 96.3   | 96.0   | 96.0   | 96.0 | 96.7     | 96.7     | 96.7     | 96.7     | 96.7 | 96.7     | 96.7 | 96.7 |
| GE 500   | .3 |                             | 96.1   | 96.1   | 96.1   | 96.3   | 96.3   | 96.3   | 96.3 | 96.7     | 96.7     | 96.7     | 96.7     | 96.7 | 96.7     | 96.7 | 96.7 |
| GE 400   | .3 |                             | 96.1   | 96.1   | 96.1   | 96.3   | 96.3   | 96.3   | 96.3 | 96.7     | 96.7     | 96.7     | 96.7     | 96.7 | 96.7     | 96.7 | 96.7 |
| GE 300   | .7 |                             | 96.1   | 96.1   | 96.1   | 96.3   | 96.3   | 96.3   | 96.3 | 96.7     | 96.7     | 96.7     | 96.7     | 96.7 | 96.7     | 96.7 | 96.7 |
| GE 200   | .3 |                             | 96.3   | 96.3   | 96.3   | 96.3   | 96.3   | 96.3   | 96.3 | 96.7     | 96.7     | 96.7     | 96.7     | 96.7 | 96.7     | 96.7 | 96.7 |
| GE 100   | .7 |                             | 96.3   | 96.3   | 96.3   | 96.3   | 96.3   | 96.3   | 96.3 | 96.7     | 96.7     | 96.7     | 96.7     | 96.7 | 96.7     | 96.7 | 96.7 |

TOTAL NUMBER OF OBSERVATIONS: 301

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM FOURLY OBSERVATIONS

FIELD OF RECORD: 72-87

MONTH: MAY HOURS (LST): 1200-1400

[illegible]

TOTAL NUMBER OF OBSERVATIONS: 217

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

FILE NO. OF RECORD: 76-67

MONTH: MAY HOURS(LST): 1500-1700

[illegible]

TOTAL NUMBER OF OBSERVATIONS: 799

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VISIBILITY  
FROM HOURLY OBSERVATIONS

PERIOD OF RECORD: 78-87  
MONTH: MAY HOURS(LST): 1600-2000

TOTAL NUMBER OF OBSERVATIONS: 244

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

PERIOD OF RECORD: 78-87  
MONTH: MAY HOURS(LST): 2100-2300

[illegible]

TOTAL NUMBER OF OBSERVATIONS: 7.1

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275950 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: MAY HOURS(IST): ALL

| CEILING<br>IN<br>FEET | VISIBILITY IN STATUTE MILES |       |   |       |   |       |   |       |   |       |   |       |   |       |   |       |   |
|-----------------------|-----------------------------|-------|---|-------|---|-------|---|-------|---|-------|---|-------|---|-------|---|-------|---|
|                       | 1                           | 1 1/2 | 2 | 2 1/2 | 3 | 3 1/2 | 4 | 4 1/2 | 5 | 5 1/2 | 6 | 6 1/2 | 7 | 7 1/2 | 8 | 8 1/2 | 9 |
| NO CEIL               | 1                           | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 |
| GE 2000               | 1                           | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 |
| GE 1800               | 1                           | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 |
| GE 1600               | 1                           | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 |
| GE 1400               | 1                           | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 |
| GE 1200               | 1                           | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 |
| GE 1000               | 1                           | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 |
| GE 900                | 1                           | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 |
| GE 800                | 1                           | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 |
| GE 700                | 1                           | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 |
| GE 600                | 1                           | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 |
| GE 500                | 1                           | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 |
| GE 400                | 1                           | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 |
| GE 300                | 1                           | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 |
| GE 200                | 1                           | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 |
| GE 100                | 1                           | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 |
| GE 0                  | 1                           | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 | 1     | 1 |

TOTAL NUMBER OF OBSERVATIONS: 234

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275901 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 75-87  
MONTH: JUN HOURS (LST): 0000-0200

| CEILING<br>IN<br>FEET | VISIBILITY IN STATUTE MILES |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |
|-----------------------|-----------------------------|---------|---------|---------|---------|---------|---------|---------|---------|----------|----------|----------|----------|----------|----------|----------|
|                       | GE<br>1                     | GE<br>2 | GE<br>3 | GE<br>4 | GE<br>5 | GE<br>6 | GE<br>7 | GE<br>8 | GE<br>9 | GE<br>10 | GE<br>11 | GE<br>12 | GE<br>13 | GE<br>14 | GE<br>15 | GE<br>16 |
| NO CEIL               |                             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |
| GE 2000               |                             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |
| GE 1800               |                             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |
| GE 1600               |                             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |
| GE 1400               |                             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |
| GE 1200               |                             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |
| GE 1000               |                             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |
| GE 900                |                             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |
| GE 800                |                             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |
| GE 700                |                             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |
| GE 600                |                             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |
| GE 500                |                             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |
| GE 400                |                             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |
| GE 300                |                             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |
| GE 200                |                             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |
| GE 100                |                             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |
| GE 0                  |                             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |
| GE 2000               |                             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |
| GE 1800               |                             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |
| GE 1600               |                             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |
| GE 1400               |                             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |
| GE 1200               |                             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |
| GE 1000               |                             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |
| GE 900                |                             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |
| GE 800                |                             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |
| GE 700                |                             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |
| GE 600                |                             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |
| GE 500                |                             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |
| GE 400                |                             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |
| GE 300                |                             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |
| GE 200                |                             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |
| GE 100                |                             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |
| GE 0                  |                             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |

TOTAL NUMBER OF OBSERVATIONS: 250

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

REF ID: A60900 74-87  
 NAME: JIM HOURS (LTD): 0305-0500

[illegible]

14. The following are the results of a survey of 1000 people:

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING AND VISIBILITY  
FROM FOURLY OBSERVATIONS

STATION NUMBER: 27000 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: JAN HOURS (LST): 0600-0500

| CEILING    |          | VISIBILITY IN STATUTE MILES |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |
|------------|----------|-----------------------------|---------|---------|---------|---------|---------|---------|---------|---------|----------|----------|----------|----------|----------|----------|----------|
| IN<br>FEET | GE<br>10 | GE<br>1                     | GE<br>2 | GE<br>3 | GE<br>4 | GE<br>5 | GE<br>6 | GE<br>7 | GE<br>8 | GE<br>9 | GE<br>10 | GE<br>11 | GE<br>12 | GE<br>13 | GE<br>14 | GE<br>15 | GE<br>16 |
| NO CEILING |          | 46.2                        | 44.2    | 48.3    | 49.3    | 51.0    | 51.0    | 51.0    | 51.4    | 51.4    | 51.4     | 51.7     | 52.4     | 52.4     | 52.4     | 52.7     |          |
| GE 2000    |          | 5.1                         | 5.1     | 5.1     | 5.1     | 5.1     | 5.1     | 5.1     | 5.4     | 5.4     | 5.4      | 5.4      | 5.4      | 5.4      | 5.4      | 5.8      |          |
| GE 1800    |          | 5.1                         | 5.1     | 5.1     | 5.1     | 5.1     | 5.1     | 5.1     | 5.4     | 5.4     | 5.4      | 5.4      | 5.4      | 5.4      | 5.4      | 5.8      |          |
| GE 1600    |          | 5.1                         | 5.1     | 5.1     | 5.1     | 5.1     | 5.1     | 5.1     | 5.4     | 5.4     | 5.4      | 5.4      | 5.4      | 5.4      | 5.4      | 5.8      |          |
| GE 1400    |          | 5.1                         | 5.1     | 5.1     | 5.1     | 5.1     | 5.1     | 5.1     | 5.4     | 5.4     | 5.4      | 5.4      | 5.4      | 5.4      | 5.4      | 5.8      |          |
| GE 1200    |          | 5.1                         | 5.1     | 5.1     | 5.1     | 5.1     | 5.1     | 5.1     | 5.4     | 5.4     | 5.4      | 5.4      | 5.4      | 5.4      | 5.4      | 5.8      |          |
| GE 1000    |          | 65.6                        | 66.7    | 66.7    | 69.7    | 72.1    | 72.1    | 72.1    | 73.5    | 73.5    | 73.5     | 73.5     | 74.5     | 74.5     | 74.5     | 74.8     |          |
| GE 900     |          | 65.6                        | 66.7    | 66.7    | 69.7    | 72.1    | 72.1    | 72.1    | 73.5    | 73.5    | 73.5     | 73.5     | 74.5     | 74.5     | 74.5     | 74.8     |          |
| GE 800     |          | 65.6                        | 66.7    | 66.7    | 69.7    | 72.1    | 72.1    | 72.1    | 73.5    | 73.5    | 73.5     | 73.5     | 74.5     | 74.5     | 74.5     | 74.8     |          |
| GE 700     |          | 65.6                        | 66.7    | 66.7    | 69.7    | 72.1    | 72.1    | 72.1    | 73.5    | 73.5    | 73.5     | 73.5     | 74.5     | 74.5     | 74.5     | 74.8     |          |
| GE 600     |          | 65.6                        | 66.7    | 66.7    | 69.7    | 72.1    | 72.1    | 72.1    | 73.5    | 73.5    | 73.5     | 73.5     | 74.5     | 74.5     | 74.5     | 74.8     |          |
| GE 500     |          | 71.1                        | 71.1    | 71.1    | 74.1    | 77.6    | 77.6    | 77.6    | 78.9    | 78.9    | 78.9     | 78.9     | 79.9     | 79.9     | 79.9     | 80.3     |          |
| GE 400     |          | 71.1                        | 71.1    | 71.1    | 74.1    | 77.6    | 77.6    | 77.6    | 78.9    | 78.9    | 78.9     | 78.9     | 79.9     | 79.9     | 79.9     | 80.3     |          |
| GE 300     |          | 71.1                        | 71.1    | 71.1    | 74.1    | 77.6    | 77.6    | 77.6    | 78.9    | 78.9    | 78.9     | 78.9     | 79.9     | 79.9     | 79.9     | 80.3     |          |
| GE 200     |          | 71.1                        | 71.1    | 71.1    | 74.1    | 77.6    | 77.6    | 77.6    | 78.9    | 78.9    | 78.9     | 78.9     | 79.9     | 79.9     | 79.9     | 80.3     |          |
| GE 100     |          | 71.1                        | 71.1    | 71.1    | 74.1    | 77.6    | 77.6    | 77.6    | 78.9    | 78.9    | 78.9     | 78.9     | 79.9     | 79.9     | 79.9     | 80.3     |          |
| GE 0       |          | 71.1                        | 71.1    | 71.1    | 74.1    | 77.6    | 77.6    | 77.6    | 78.9    | 78.9    | 78.9     | 78.9     | 79.9     | 79.9     | 79.9     | 80.3     |          |
| GE 2000    |          | 71.1                        | 71.1    | 71.1    | 74.1    | 77.6    | 77.6    | 77.6    | 78.9    | 78.9    | 78.9     | 78.9     | 79.9     | 79.9     | 79.9     | 80.3     |          |
| GE 1800    |          | 71.1                        | 71.1    | 71.1    | 74.1    | 77.6    | 77.6    | 77.6    | 78.9    | 78.9    | 78.9     | 78.9     | 79.9     | 79.9     | 79.9     | 80.3     |          |
| GE 1600    |          | 71.1                        | 71.1    | 71.1    | 74.1    | 77.6    | 77.6    | 77.6    | 78.9    | 78.9    | 78.9     | 78.9     | 79.9     | 79.9     | 79.9     | 80.3     |          |
| GE 1400    |          | 71.1                        | 71.1    | 71.1    | 74.1    | 77.6    | 77.6    | 77.6    | 78.9    | 78.9    | 78.9     | 78.9     | 79.9     | 79.9     | 79.9     | 80.3     |          |
| GE 1200    |          | 71.1                        | 71.1    | 71.1    | 74.1    | 77.6    | 77.6    | 77.6    | 78.9    | 78.9    | 78.9     | 78.9     | 79.9     | 79.9     | 79.9     | 80.3     |          |
| GE 1000    |          | 71.1                        | 71.1    | 71.1    | 74.1    | 77.6    | 77.6    | 77.6    | 78.9    | 78.9    | 78.9     | 78.9     | 79.9     | 79.9     | 79.9     | 80.3     |          |
| GE 900     |          | 71.1                        | 71.1    | 71.1    | 74.1    | 77.6    | 77.6    | 77.6    | 78.9    | 78.9    | 78.9     | 78.9     | 79.9     | 79.9     | 79.9     | 80.3     |          |
| GE 800     |          | 71.1                        | 71.1    | 71.1    | 74.1    | 77.6    | 77.6    | 77.6    | 78.9    | 78.9    | 78.9     | 78.9     | 79.9     | 79.9     | 79.9     | 80.3     |          |
| GE 700     |          | 71.1                        | 71.1    | 71.1    | 74.1    | 77.6    | 77.6    | 77.6    | 78.9    | 78.9    | 78.9     | 78.9     | 79.9     | 79.9     | 79.9     | 80.3     |          |
| GE 600     |          | 71.1                        | 71.1    | 71.1    | 74.1    | 77.6    | 77.6    | 77.6    | 78.9    | 78.9    | 78.9     | 78.9     | 79.9     | 79.9     | 79.9     | 80.3     |          |
| GE 500     |          | 71.1                        | 71.1    | 71.1    | 74.1    | 77.6    | 77.6    | 77.6    | 78.9    | 78.9    | 78.9     | 78.9     | 79.9     | 79.9     | 79.9     | 80.3     |          |
| GE 400     |          | 71.1                        | 71.1    | 71.1    | 74.1    | 77.6    | 77.6    | 77.6    | 78.9    | 78.9    | 78.9     | 78.9     | 79.9     | 79.9     | 79.9     | 80.3     |          |
| GE 300     |          | 71.1                        | 71.1    | 71.1    | 74.1    | 77.6    | 77.6    | 77.6    | 78.9    | 78.9    | 78.9     | 78.9     | 79.9     | 79.9     | 79.9     | 80.3     |          |
| GE 200     |          | 71.1                        | 71.1    | 71.1    | 74.1    | 77.6    | 77.6    | 77.6    | 78.9    | 78.9    | 78.9     | 78.9     | 79.9     | 79.9     | 79.9     | 80.3     |          |
| GE 100     |          | 71.1                        | 71.1    | 71.1    | 74.1    | 77.6    | 77.6    | 77.6    | 78.9    | 78.9    | 78.9     | 78.9     | 79.9     | 79.9     | 79.9     | 80.3     |          |
| GE 0       |          | 71.1                        | 71.1    | 71.1    | 74.1    | 77.6    | 77.6    | 77.6    | 78.9    | 78.9    | 78.9     | 78.9     | 79.9     | 79.9     | 79.9     | 80.3     |          |

TOTAL NUMBER OF OBSERVATIONS: 244

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM FOURLY OBSERVATIONS

STATION NUMBER: 27595 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 76-87  
MONTH: JUN HOURS(IST): 0900-1100

| CEILING<br>IN<br>FEET | VISIBILITY IN STATUTE MILES |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |
|-----------------------|-----------------------------|---------|---------|---------|---------|---------|---------|---------|---------|----------|----------|----------|----------|----------|----------|----------|
|                       | GE<br>1                     | GE<br>2 | GE<br>3 | GE<br>4 | GE<br>5 | GE<br>6 | GE<br>7 | GE<br>8 | GE<br>9 | GE<br>10 | GE<br>11 | GE<br>12 | GE<br>13 | GE<br>14 | GE<br>15 | GE<br>16 |
| NO CEIL               | 1                           | 1       | 1       | 1       | 1       | 1       | 1       | 1       | 1       | 1        | 1        | 1        | 1        | 1        | 1        | 1        |
| GE 2000               | 1                           | 1       | 1       | 1       | 1       | 1       | 1       | 1       | 1       | 1        | 1        | 1        | 1        | 1        | 1        | 1        |
| GE 1800               | 1                           | 1       | 1       | 1       | 1       | 1       | 1       | 1       | 1       | 1        | 1        | 1        | 1        | 1        | 1        | 1        |
| GE 1600               | 1                           | 1       | 1       | 1       | 1       | 1       | 1       | 1       | 1       | 1        | 1        | 1        | 1        | 1        | 1        | 1        |
| GE 1400               | 1                           | 1       | 1       | 1       | 1       | 1       | 1       | 1       | 1       | 1        | 1        | 1        | 1        | 1        | 1        | 1        |
| GE 1200               | 1                           | 1       | 1       | 1       | 1       | 1       | 1       | 1       | 1       | 1        | 1        | 1        | 1        | 1        | 1        | 1        |
| GE 1000               | 1                           | 1       | 1       | 1       | 1       | 1       | 1       | 1       | 1       | 1        | 1        | 1        | 1        | 1        | 1        | 1        |
| GE 800                | 1                           | 1       | 1       | 1       | 1       | 1       | 1       | 1       | 1       | 1        | 1        | 1        | 1        | 1        | 1        | 1        |
| GE 600                | 1                           | 1       | 1       | 1       | 1       | 1       | 1       | 1       | 1       | 1        | 1        | 1        | 1        | 1        | 1        | 1        |
| GE 400                | 1                           | 1       | 1       | 1       | 1       | 1       | 1       | 1       | 1       | 1        | 1        | 1        | 1        | 1        | 1        | 1        |
| GE 200                | 1                           | 1       | 1       | 1       | 1       | 1       | 1       | 1       | 1       | 1        | 1        | 1        | 1        | 1        | 1        | 1        |
| GE 100                | 1                           | 1       | 1       | 1       | 1       | 1       | 1       | 1       | 1       | 1        | 1        | 1        | 1        | 1        | 1        | 1        |
| GE 50                 | 1                           | 1       | 1       | 1       | 1       | 1       | 1       | 1       | 1       | 1        | 1        | 1        | 1        | 1        | 1        | 1        |
| GE 25                 | 1                           | 1       | 1       | 1       | 1       | 1       | 1       | 1       | 1       | 1        | 1        | 1        | 1        | 1        | 1        | 1        |
| GE 12                 | 1                           | 1       | 1       | 1       | 1       | 1       | 1       | 1       | 1       | 1        | 1        | 1        | 1        | 1        | 1        | 1        |
| GE 6                  | 1                           | 1       | 1       | 1       | 1       | 1       | 1       | 1       | 1       | 1        | 1        | 1        | 1        | 1        | 1        | 1        |
| GE 3                  | 1                           | 1       | 1       | 1       | 1       | 1       | 1       | 1       | 1       | 1        | 1        | 1        | 1        | 1        | 1        | 1        |
| GE 1                  | 1                           | 1       | 1       | 1       | 1       | 1       | 1       | 1       | 1       | 1        | 1        | 1        | 1        | 1        | 1        | 1        |
| GE 0                  | 1                           | 1       | 1       | 1       | 1       | 1       | 1       | 1       | 1       | 1        | 1        | 1        | 1        | 1        | 1        | 1        |

TOTAL NUMBER OF OBSERVATIONS: 100

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VEHICLES VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 27595 STATION NAME: KAZAN USR

FILE NUMBER OF RECORD: 78-67

MONTH: JUN

HOURS (LST): 1700-1400

| CEILING    | VISIBILITY IN STATUTE MILES |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|------------|-----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|            | 1/4                         | 1/2   | 3/4   | 1     | 1 1/4 | 1 1/2 | 2     | 2 1/4 | 2 1/2 | 3     | 3 1/4 | 3 1/2 | 4     | 4 1/4 | 4 1/2 | 5     | 5 1/4 |
|            | FEET                        | 100   | 200   | 300   | 400   | 500   | 600   | 700   | 800   | 900   | 1000  | 1100  | 1200  | 1300  | 1400  | 1500  | 1600  |
| 40 CEILING | 1.0                         | 37.4  | 37.4  | 37.4  | 37.4  | 37.4  | 37.4  | 37.4  | 37.4  | 37.4  | 37.4  | 37.4  | 37.4  | 37.4  | 37.4  | 37.4  | 37.4  |
| GE 20000   | 1.0                         | 43.9  | 43.9  | 43.9  | 43.9  | 43.9  | 43.9  | 43.9  | 43.9  | 43.9  | 43.9  | 43.9  | 43.9  | 43.9  | 43.9  | 43.9  | 43.9  |
| GE 16000   | 1.0                         | 43.9  | 43.9  | 43.9  | 43.9  | 43.9  | 43.9  | 43.9  | 43.9  | 43.9  | 43.9  | 43.9  | 43.9  | 43.9  | 43.9  | 43.9  | 43.9  |
| GE 16000   | 1.0                         | 43.9  | 43.9  | 43.9  | 43.9  | 43.9  | 43.9  | 43.9  | 43.9  | 43.9  | 43.9  | 43.9  | 43.9  | 43.9  | 43.9  | 43.9  | 43.9  |
| GE 12000   | 1.0                         | 43.9  | 43.9  | 43.9  | 43.9  | 43.9  | 43.9  | 43.9  | 43.9  | 43.9  | 43.9  | 43.9  | 43.9  | 43.9  | 43.9  | 43.9  | 43.9  |
| GE 12000   | 1.0                         | 43.9  | 43.9  | 43.9  | 43.9  | 43.9  | 43.9  | 43.9  | 43.9  | 43.9  | 43.9  | 43.9  | 43.9  | 43.9  | 43.9  | 43.9  | 43.9  |
| GE 10000   | 1.4                         | 58.5  | 58.5  | 58.5  | 58.5  | 58.5  | 58.5  | 58.5  | 58.5  | 58.5  | 58.5  | 58.5  | 58.5  | 58.5  | 58.5  | 58.5  | 58.5  |
| GE 9000    | 1.4                         | 58.5  | 58.5  | 58.5  | 58.5  | 58.5  | 58.5  | 58.5  | 58.5  | 58.5  | 58.5  | 58.5  | 58.5  | 58.5  | 58.5  | 58.5  | 58.5  |
| GE 8000    | 1.4                         | 58.5  | 58.5  | 58.5  | 58.5  | 58.5  | 58.5  | 58.5  | 58.5  | 58.5  | 58.5  | 58.5  | 58.5  | 58.5  | 58.5  | 58.5  | 58.5  |
| GE 7000    | 1.4                         | 58.5  | 58.5  | 58.5  | 58.5  | 58.5  | 58.5  | 58.5  | 58.5  | 58.5  | 58.5  | 58.5  | 58.5  | 58.5  | 58.5  | 58.5  | 58.5  |
| GE 6000    | 1.4                         | 60.2  | 60.2  | 60.2  | 60.2  | 60.2  | 60.2  | 60.2  | 60.2  | 60.2  | 60.2  | 60.2  | 60.2  | 60.2  | 60.2  | 60.2  | 60.2  |
| GE 5000    | 1.7                         | 65.6  | 65.6  | 65.6  | 65.6  | 65.6  | 65.6  | 65.6  | 65.6  | 65.6  | 65.6  | 65.6  | 65.6  | 65.6  | 65.6  | 65.6  | 65.6  |
| GE 4000    | 1.7                         | 65.6  | 65.6  | 65.6  | 65.6  | 65.6  | 65.6  | 65.6  | 65.6  | 65.6  | 65.6  | 65.6  | 65.6  | 65.6  | 65.6  | 65.6  | 65.6  |
| GE 4000    | 1.7                         | 75.9  | 75.9  | 75.9  | 75.9  | 75.9  | 75.9  | 75.9  | 75.9  | 75.9  | 75.9  | 75.9  | 75.9  | 75.9  | 75.9  | 75.9  | 75.9  |
| GE 3000    | 1.7                         | 76.9  | 76.9  | 76.9  | 76.9  | 76.9  | 76.9  | 76.9  | 76.9  | 76.9  | 76.9  | 76.9  | 76.9  | 76.9  | 76.9  | 76.9  | 76.9  |
| GE 3000    | 1.7                         | 80.3  | 80.3  | 80.3  | 80.3  | 80.3  | 80.3  | 80.3  | 80.3  | 80.3  | 80.3  | 80.3  | 80.3  | 80.3  | 80.3  | 80.3  | 80.3  |
| GE 2500    | 1.7                         | 84.4  | 84.4  | 84.4  | 84.4  | 84.4  | 84.4  | 84.4  | 84.4  | 84.4  | 84.4  | 84.4  | 84.4  | 84.4  | 84.4  | 84.4  | 84.4  |
| GE 2000    | 1.7                         | 89.5  | 89.5  | 89.5  | 89.5  | 89.5  | 89.5  | 89.5  | 89.5  | 89.5  | 89.5  | 89.5  | 89.5  | 89.5  | 89.5  | 89.5  | 89.5  |
| GE 1800    | 1.7                         | 90.8  | 90.8  | 90.8  | 90.8  | 90.8  | 90.8  | 90.8  | 90.8  | 90.8  | 90.8  | 90.8  | 90.8  | 90.8  | 90.8  | 90.8  | 90.8  |
| GE 1500    | 1.7                         | 92.5  | 92.5  | 92.5  | 92.5  | 92.5  | 92.5  | 92.5  | 92.5  | 92.5  | 92.5  | 92.5  | 92.5  | 92.5  | 92.5  | 92.5  | 92.5  |
| GE 1200    | 1.7                         | 95.6  | 95.6  | 95.6  | 95.6  | 95.6  | 95.6  | 95.6  | 95.6  | 95.6  | 95.6  | 95.6  | 95.6  | 95.6  | 95.6  | 95.6  | 95.6  |
| GE 1000    | 1.7                         | 96.6  | 96.6  | 96.6  | 96.6  | 96.6  | 96.6  | 96.6  | 96.6  | 96.6  | 96.6  | 96.6  | 96.6  | 96.6  | 96.6  | 96.6  | 96.6  |
| GE 900     | 1.7                         | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  |
| GE 800     | 1.7                         | 97.6  | 97.6  | 97.6  | 97.6  | 97.6  | 97.6  | 97.6  | 97.6  | 97.6  | 97.6  | 97.6  | 97.6  | 97.6  | 97.6  | 97.6  | 97.6  |
| GE 700     | 1.7                         | 98.7  | 98.7  | 98.7  | 98.7  | 98.7  | 98.7  | 98.7  | 98.7  | 98.7  | 98.7  | 98.7  | 98.7  | 98.7  | 98.7  | 98.7  | 98.7  |
| GE 600     | 1.7                         | 99.7  | 99.7  | 99.7  | 99.7  | 99.7  | 99.7  | 99.7  | 99.7  | 99.7  | 99.7  | 99.7  | 99.7  | 99.7  | 99.7  | 99.7  | 99.7  |
| GE 500     | 1.7                         | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| GE 400     | 1.7                         | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| GE 300     | 1.7                         | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| GE 200     | 1.7                         | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| GE 100     | 1.7                         | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| GE 0       | 1.7                         | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |

TOTAL NUMBER OF OBSERVATIONS: 244

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MSC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 27595 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: JUL HOURS(IST): 1500-1700

| CEILING<br>IN<br>FEET | VISIBILITY IN STATUTE MILES |      |      |      |      |      |      |       |       |       |        |        |        |        |         |      |
|-----------------------|-----------------------------|------|------|------|------|------|------|-------|-------|-------|--------|--------|--------|--------|---------|------|
|                       | 1                           | GE   | GE   | GE   | GE   | GE   | GE   | GE    | GE    | GE    | GE     | GE     | GE     | GE     | GE      | GE   |
|                       | 1                           | 1/2  | 1/4  | 1/8  | 1/16 | 1/32 | 1/64 | 1/128 | 1/256 | 1/512 | 1/1024 | 1/2048 | 1/4096 | 1/8192 | 1/16384 | 0    |
| NO CEIL               | 1                           | 1    | 42.7 | 42.7 | 42.7 | 42.7 | 42.7 | 42.7  | 42.7  | 42.7  | 42.7   | 42.7   | 42.7   | 42.7   | 42.7    | 42.7 |
| GE 20000              | 1                           | 1    | 49.3 | 49.3 | 49.3 | 49.3 | 49.3 | 49.3  | 49.3  | 49.3  | 49.3   | 49.3   | 49.3   | 49.3   | 49.3    | 49.3 |
| GE 18000              | 1                           | 1    | 49.3 | 49.3 | 49.3 | 49.3 | 49.3 | 49.3  | 49.3  | 49.3  | 49.3   | 49.3   | 49.3   | 49.3   | 49.3    | 49.3 |
| GE 16000              | 1                           | 1    | 49.3 | 49.3 | 49.3 | 49.3 | 49.3 | 49.3  | 49.3  | 49.3  | 49.3   | 49.3   | 49.3   | 49.3   | 49.3    | 49.3 |
| GE 14000              | 1                           | 1    | 49.3 | 49.3 | 49.3 | 49.3 | 49.3 | 49.3  | 49.3  | 49.3  | 49.3   | 49.3   | 49.3   | 49.3   | 49.3    | 49.3 |
| GE 12000              | 1                           | 1    | 49.3 | 49.3 | 49.3 | 49.3 | 49.3 | 49.3  | 49.3  | 49.3  | 49.3   | 49.3   | 49.3   | 49.3   | 49.3    | 49.3 |
| GE 10000              | 1                           | 1    | 58.7 | 58.7 | 58.7 | 58.7 | 58.7 | 58.7  | 58.7  | 58.7  | 58.7   | 58.7   | 58.7   | 58.7   | 58.7    | 58.7 |
| GE 9000               | 1                           | 1    | 58.7 | 58.7 | 58.7 | 58.7 | 58.7 | 58.7  | 58.7  | 58.7  | 58.7   | 58.7   | 58.7   | 58.7   | 58.7    | 58.7 |
| GE 8000               | 1                           | 1    | 58.7 | 58.7 | 58.7 | 58.7 | 58.7 | 58.7  | 58.7  | 58.7  | 58.7   | 58.7   | 58.7   | 58.7   | 58.7    | 58.7 |
| GE 7000               | 1                           | 1    | 58.7 | 58.7 | 58.7 | 58.7 | 58.7 | 58.7  | 58.7  | 58.7  | 58.7   | 58.7   | 58.7   | 58.7   | 58.7    | 58.7 |
| GE 6000               | 1                           | 1    | 60.4 | 60.4 | 60.4 | 60.4 | 60.4 | 60.4  | 60.4  | 60.4  | 60.4   | 60.4   | 60.4   | 60.4   | 60.4    | 60.4 |
| GE 5000               | 1.7                         | 70.1 | 70.1 | 70.1 | 70.1 | 70.1 | 70.1 | 70.1  | 70.1  | 70.1  | 70.1   | 70.1   | 70.1   | 70.1   | 70.1    | 70.1 |
| GE 4500               | 1.9                         | 70.8 | 70.8 | 70.8 | 70.8 | 70.8 | 70.8 | 70.8  | 70.8  | 70.8  | 70.8   | 70.8   | 70.8   | 70.8   | 70.8    | 70.8 |
| GE 4000               | 1.7                         | 83.0 | 83.0 | 83.0 | 83.0 | 83.0 | 83.0 | 83.0  | 83.0  | 83.0  | 83.0   | 83.0   | 83.0   | 83.0   | 83.0    | 83.0 |
| GE 3500               | 1.7                         | 83.7 | 83.7 | 83.7 | 83.7 | 83.7 | 83.7 | 83.7  | 83.7  | 83.7  | 83.7   | 83.7   | 83.7   | 83.7   | 83.7    | 83.7 |
| GE 3000               | 1.7                         | 87.2 | 87.2 | 87.2 | 87.2 | 87.2 | 87.2 | 87.2  | 87.2  | 87.2  | 87.2   | 87.2   | 87.2   | 87.2   | 87.2    | 87.2 |
| GE 2500               | 1.7                         | 91.3 | 91.3 | 91.3 | 91.3 | 91.3 | 91.3 | 91.3  | 91.3  | 91.3  | 91.3   | 91.3   | 91.3   | 91.3   | 91.3    | 91.3 |
| GE 2000               | 1.7                         | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4  | 92.4  | 92.4  | 92.4   | 92.4   | 92.4   | 92.4   | 92.4    | 92.4 |
| GE 1800               | 1.7                         | 92.7 | 92.7 | 92.7 | 92.7 | 92.7 | 92.7 | 92.7  | 92.7  | 92.7  | 92.7   | 92.7   | 92.7   | 92.7   | 92.7    | 92.7 |
| GE 1600               | 1.7                         | 93.4 | 93.4 | 93.4 | 93.4 | 93.4 | 93.4 | 93.4  | 93.4  | 93.4  | 93.4   | 93.4   | 93.4   | 93.4   | 93.4    | 93.4 |
| GE 1400               | 1.7                         | 95.5 | 95.5 | 95.5 | 95.5 | 95.5 | 95.5 | 95.5  | 95.5  | 95.5  | 95.5   | 95.5   | 95.5   | 95.5   | 95.5    | 95.5 |
| GE 1200               | 1.7                         | 96.5 | 96.5 | 96.5 | 96.5 | 96.5 | 96.5 | 96.5  | 96.5  | 96.5  | 96.5   | 96.5   | 96.5   | 96.5   | 96.5    | 96.5 |
| GE 1000               | 1.7                         | 97.9 | 97.9 | 97.9 | 97.9 | 97.9 | 97.9 | 97.9  | 97.9  | 97.9  | 97.9   | 97.9   | 97.9   | 97.9   | 97.9    | 97.9 |
| GE 900                | 1.7                         | 97.2 | 97.2 | 97.2 | 97.2 | 97.2 | 97.2 | 97.2  | 97.2  | 97.2  | 97.2   | 97.2   | 97.2   | 97.2   | 97.2    | 97.2 |
| GE 800                | 1.7                         | 97.2 | 97.2 | 97.2 | 97.2 | 97.2 | 97.2 | 97.2  | 97.2  | 97.2  | 97.2   | 97.2   | 97.2   | 97.2   | 97.2    | 97.2 |
| GE 700                | 1.7                         | 97.9 | 97.9 | 97.9 | 97.9 | 97.9 | 97.9 | 97.9  | 97.9  | 97.9  | 97.9   | 97.9   | 97.9   | 97.9   | 97.9    | 97.9 |
| GE 600                | 1.7                         | 97.9 | 97.9 | 97.9 | 97.9 | 97.9 | 97.9 | 97.9  | 97.9  | 97.9  | 97.9   | 97.9   | 97.9   | 97.9   | 97.9    | 97.9 |
| GE 500                | 1.7                         | 97.9 | 97.9 | 97.9 | 97.9 | 97.9 | 97.9 | 97.9  | 97.9  | 97.9  | 97.9   | 97.9   | 97.9   | 97.9   | 97.9    | 97.9 |
| GE 400                | 1.7                         | 97.9 | 97.9 | 97.9 | 97.9 | 97.9 | 97.9 | 97.9  | 97.9  | 97.9  | 97.9   | 97.9   | 97.9   | 97.9   | 97.9    | 97.9 |
| GE 300                | 1.7                         | 97.9 | 97.9 | 97.9 | 97.9 | 97.9 | 97.9 | 97.9  | 97.9  | 97.9  | 97.9   | 97.9   | 97.9   | 97.9   | 97.9    | 97.9 |
| GE 200                | 1.7                         | 97.9 | 97.9 | 97.9 | 97.9 | 97.9 | 97.9 | 97.9  | 97.9  | 97.9  | 97.9   | 97.9   | 97.9   | 97.9   | 97.9    | 97.9 |
| GE 100                | 1.7                         | 97.9 | 97.9 | 97.9 | 97.9 | 97.9 | 97.9 | 97.9  | 97.9  | 97.9  | 97.9   | 97.9   | 97.9   | 97.9   | 97.9    | 97.9 |

TOTAL NUMBER OF OBSERVATIONS: 258

GLOBAL CLIMATOLOGY BRANCH  
USAF/ETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM FOURLY OBSERVATIONS

STATION NUMBER: 27591 STATION NAME: KAZAN, USSR

PERIOD OF RECORD: 76-87  
MONTH: JUN HOURS (LST): 1800-2500

| CEILING<br>IN<br>FEET | VISIBILITY IN STATUTE MILES |      |      |      |      |      |      |      |      |      |       |       |       |       |       |       |
|-----------------------|-----------------------------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|
|                       | 1                           | GE 1 | GE 2 | GE 3 | GE 4 | GE 5 | GE 6 | GE 7 | GE 8 | GE 9 | GE 10 | GE 11 | GE 12 | GE 13 | GE 14 | GE 15 |
| NO CLIM               | 1                           | 1.7  | 45.6 | 45.6 | 45.6 | 45.6 | 45.6 | 45.6 | 45.6 | 45.6 | 45.6  | 45.6  | 45.6  | 45.6  | 45.6  | 45.6  |
| GE 2000               | 1                           | 1.7  | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4  | 52.4  | 52.4  | 52.4  | 52.4  | 52.4  |
| GE 1800               | 1                           | 1.7  | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4  | 52.4  | 52.4  | 52.4  | 52.4  | 52.4  |
| GE 1600               | 1                           | 1.7  | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4  | 52.4  | 52.4  | 52.4  | 52.4  | 52.4  |
| GE 1400               | 1                           | 1.7  | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4  | 52.4  | 52.4  | 52.4  | 52.4  | 52.4  |
| GE 1200               | 1                           | 1.7  | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4  | 52.4  | 52.4  | 52.4  | 52.4  | 52.4  |
| GE 1000               | 1                           | 1.7  | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4  | 52.4  | 52.4  | 52.4  | 52.4  | 52.4  |
| GE 900                | 1                           | 1.7  | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4  | 52.4  | 52.4  | 52.4  | 52.4  | 52.4  |
| GE 800                | 1                           | 1.7  | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4  | 52.4  | 52.4  | 52.4  | 52.4  | 52.4  |
| GE 700                | 1                           | 1.7  | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4  | 52.4  | 52.4  | 52.4  | 52.4  | 52.4  |
| GE 600                | 1                           | 1.7  | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4  | 52.4  | 52.4  | 52.4  | 52.4  | 52.4  |
| GE 500                | 1                           | 1.7  | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4  | 52.4  | 52.4  | 52.4  | 52.4  | 52.4  |
| GE 400                | 1                           | 1.7  | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4  | 52.4  | 52.4  | 52.4  | 52.4  | 52.4  |
| GE 300                | 1                           | 1.7  | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4  | 52.4  | 52.4  | 52.4  | 52.4  | 52.4  |
| GE 200                | 1                           | 1.7  | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4  | 52.4  | 52.4  | 52.4  | 52.4  | 52.4  |
| GE 100                | 1                           | 1.7  | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4  | 52.4  | 52.4  | 52.4  | 52.4  | 52.4  |
| GE 50                 | 1                           | 1.7  | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4  | 52.4  | 52.4  | 52.4  | 52.4  | 52.4  |
| GE 20                 | 1                           | 1.7  | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4  | 52.4  | 52.4  | 52.4  | 52.4  | 52.4  |
| GE 10                 | 1                           | 1.7  | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4  | 52.4  | 52.4  | 52.4  | 52.4  | 52.4  |
| GE 5                  | 1                           | 1.7  | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4  | 52.4  | 52.4  | 52.4  | 52.4  | 52.4  |
| GE 2                  | 1                           | 1.7  | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4  | 52.4  | 52.4  | 52.4  | 52.4  | 52.4  |
| GE 1                  | 1                           | 1.7  | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4  | 52.4  | 52.4  | 52.4  | 52.4  | 52.4  |
| GE 0                  | 1                           | 1.7  | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4 | 52.4  | 52.4  | 52.4  | 52.4  | 52.4  | 52.4  |

TOTAL NUMBER OF OBSERVATIONS: 244

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

PERIOD OF RECORD: 78-87  
MONTH: JUN HOURS(LST): 2100-2300

TOTAL NUMBER OF OBSERVATIONS: 274

GLOBAL CLIMATOLOGY BRANCH  
USAFCTAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM FOURLY OBSERVATIONS

STATION NUMBER: 27095 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: JUN HOURS (LST): ALL

| CEILING<br>IN<br>FEET | 1 | VISIBILITY IN STATUTE MILES |      |      |      |      |      |       |      |      |       |      |      |      |      |      |       |
|-----------------------|---|-----------------------------|------|------|------|------|------|-------|------|------|-------|------|------|------|------|------|-------|
|                       |   | GE                          | GE   | GE   | GE   | GE   | GE   | GE    | GE   | GE   | GE    | GE   | GE   | GE   | GE   | GE   | GE    |
|                       |   | 10                          | 7    | 5    | 4    | 3    | 2    | 1 1/2 | 1    | 1/2  | 1 1/4 | 1    | 3/4  | 5/8  | 1/2  | 5/16 | 1/4   |
| NO CEIL               | 1 | .4                          | 45.7 | 45.7 | 45.7 | 45.0 | 46.0 | 46.5  | 46.5 | 47.0 | 47.0  | 47.1 | 47.0 | 47.1 | 47.1 | 47.1 | 47.3  |
| GE 20000              | 1 | .4                          | 47.7 | 49.8 | 49.8 | 50.1 | 50.7 | 50.7  | 50.8 | 51.2 | 51.2  | 51.2 | 51.2 | 51.2 | 51.4 | 51.4 | 51.5  |
| GE 18000              | 1 | .4                          | 47.7 | 49.8 | 49.8 | 50.1 | 50.7 | 50.7  | 50.8 | 51.2 | 51.2  | 51.2 | 51.2 | 51.2 | 51.4 | 51.4 | 51.5  |
| GE 16000              | 1 | .4                          | 47.7 | 49.8 | 49.8 | 50.1 | 50.7 | 50.7  | 50.8 | 51.2 | 51.2  | 51.2 | 51.2 | 51.2 | 51.4 | 51.4 | 51.5  |
| GE 14000              | 1 | .4                          | 47.7 | 49.8 | 49.8 | 50.1 | 50.7 | 50.7  | 50.8 | 51.2 | 51.2  | 51.2 | 51.2 | 51.2 | 51.4 | 51.4 | 51.5  |
| GE 12000              | 1 | .4                          | 47.7 | 49.8 | 49.8 | 50.1 | 50.7 | 50.7  | 50.8 | 51.2 | 51.2  | 51.2 | 51.2 | 51.2 | 51.4 | 51.4 | 51.5  |
| GE 10000              | 1 | .6                          | 54.4 | 54.4 | 54.4 | 55.1 | 56.2 | 56.2  | 56.4 | 57.0 | 57.0  | 57.1 | 57.1 | 57.1 | 57.2 | 57.2 | 57.4  |
| GE 9000               | 1 | .6                          | 54.4 | 54.4 | 54.4 | 55.1 | 56.2 | 56.2  | 56.4 | 57.0 | 57.0  | 57.1 | 57.1 | 57.1 | 57.2 | 57.2 | 57.4  |
| GE 8000               | 1 | .6                          | 54.4 | 54.4 | 54.4 | 55.1 | 56.2 | 56.2  | 56.4 | 57.0 | 57.0  | 57.1 | 57.1 | 57.1 | 57.2 | 57.2 | 57.4  |
| GE 7000               | 1 | .6                          | 54.4 | 54.4 | 54.4 | 55.1 | 56.2 | 56.2  | 56.4 | 57.0 | 57.0  | 57.1 | 57.1 | 57.1 | 57.2 | 57.2 | 57.4  |
| GE 6000               | 1 | .6                          | 55.8 | 55.8 | 55.8 | 56.6 | 57.7 | 57.7  | 57.8 | 58.5 | 58.5  | 58.5 | 58.5 | 58.5 | 58.7 | 58.7 | 58.8  |
| GE 5000               | 1 | .7                          | 71.9 | 72.2 | 72.2 | 72.7 | 73.9 | 73.9  | 74.1 | 74.8 | 74.8  | 74.8 | 74.8 | 74.9 | 75.0 | 75.0 | 75.1  |
| GE 4500               | 1 | .7                          | 72.4 | 72.5 | 72.5 | 73.2 | 74.4 | 74.4  | 74.6 | 75.3 | 75.3  | 75.3 | 75.4 | 75.5 | 75.5 | 75.5 | 75.6  |
| GE 4000               | 1 | .8                          | 79.9 | 80.0 | 80.0 | 80.8 | 82.1 | 82.1  | 82.3 | 82.9 | 82.9  | 82.9 | 83.0 | 83.1 | 83.2 | 83.2 | 83.3  |
| GE 3500               | 1 | .8                          | 80.4 | 80.6 | 80.6 | 81.4 | 82.7 | 82.7  | 82.9 | 83.5 | 83.5  | 83.5 | 83.6 | 83.6 | 83.6 | 83.6 | 83.9  |
| GE 3000               | 1 | .8                          | 82.3 | 82.5 | 82.5 | 83.3 | 84.6 | 84.6  | 85.0 | 85.6 | 85.6  | 85.7 | 85.7 | 85.8 | 85.9 | 85.9 | 86.0  |
| GE 2500               | 1 | .8                          | 85.1 | 85.3 | 85.3 | 86.3 | 87.9 | 87.9  | 88.1 | 88.6 | 88.6  | 88.6 | 88.6 | 88.6 | 88.6 | 88.6 | 88.6  |
| GE 2000               | 1 | .8                          | 87.2 | 87.4 | 87.4 | 88.4 | 90.1 | 90.2  | 90.4 | 91.1 | 91.2  | 91.2 | 91.2 | 91.2 | 91.4 | 91.4 | 91.5  |
| GE 1800               | 1 | .8                          | 88.1 | 88.2 | 88.2 | 89.2 | 91.0 | 91.7  | 91.2 | 92.0 | 92.0  | 92.0 | 92.0 | 92.1 | 92.2 | 92.2 | 92.4  |
| GE 1600               | 1 | .8                          | 89.1 | 89.2 | 89.2 | 90.3 | 92.1 | 92.2  | 92.4 | 93.2 | 93.2  | 93.2 | 93.3 | 93.3 | 93.5 | 93.5 | 93.6  |
| GE 1400               | 1 | .9                          | 90.7 | 90.9 | 90.9 | 92.1 | 94.1 | 94.2  | 94.4 | 95.2 | 95.4  | 95.4 | 95.4 | 95.5 | 95.6 | 95.6 | 95.8  |
| GE 1200               | 1 | .9                          | 91.3 | 91.4 | 91.4 | 92.0 | 93.3 | 93.3  | 93.5 | 94.5 | 94.5  | 94.5 | 94.5 | 94.5 | 94.5 | 94.5 | 94.5  |
| GE 1000               | 1 | .9                          | 92.3 | 92.5 | 92.5 | 93.8 | 96.3 | 96.4  | 96.6 | 97.7 | 97.8  | 97.8 | 97.8 | 97.9 | 98.0 | 98.0 | 98.2  |
| GE 900                | 1 | .9                          | 92.6 | 92.6 | 92.6 | 94.2 | 96.5 | 96.8  | 97.1 | 98.2 | 98.2  | 98.2 | 98.2 | 98.3 | 98.5 | 98.5 | 98.6  |
| GE 800                | 1 | .9                          | 92.9 | 93.1 | 93.1 | 94.5 | 97.2 | 97.3  | 97.6 | 98.4 | 98.5  | 98.5 | 98.5 | 98.5 | 98.5 | 98.5 | 98.5  |
| GE 700                | 1 | .9                          | 93.1 | 93.2 | 93.2 | 94.7 | 97.4 | 97.4  | 97.7 | 99.0 | 99.1  | 99.1 | 99.1 | 99.2 | 99.4 | 99.4 | 99.5  |
| GE 600                | 1 | .9                          | 93.1 | 93.2 | 93.2 | 94.8 | 97.4 | 97.5  | 97.8 | 99.2 | 99.2  | 99.2 | 99.2 | 99.4 | 99.6 | 99.6 | 99.7  |
| GE 500                | 1 | .9                          | 93.1 | 93.3 | 93.3 | 94.5 | 97.5 | 97.5  | 97.9 | 99.4 | 99.4  | 99.4 | 99.4 | 99.6 | 99.7 | 99.7 | 99.9  |
| GE 400                | 1 | .9                          | 93.1 | 93.3 | 93.3 | 94.5 | 97.5 | 97.5  | 97.9 | 99.4 | 99.4  | 99.4 | 99.4 | 99.6 | 99.7 | 99.8 | 100.0 |
| GE 300                | 1 | .9                          | 93.1 | 93.3 | 93.3 | 94.5 | 97.5 | 97.5  | 97.9 | 99.4 | 99.4  | 99.4 | 99.4 | 99.6 | 99.7 | 99.8 | 100.0 |

TOTAL NUMBER OF OBSERVATIONS: 2740

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 27095 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: JUL HOURS(LST): 0000-0200

| NO | CEILING<br>IN<br>FEET | VISIBILITY IN STATUTE MILES |      |      |      |      |       |       |       |       |      |      |      |      |      |      |      |
|----|-----------------------|-----------------------------|------|------|------|------|-------|-------|-------|-------|------|------|------|------|------|------|------|
|    |                       | GL                          | GE   | GE   | GE   | GE   | 2     | 1 1/2 | GE    | GE    | GE   | GE   | GE   | GE   | GE   | GE   |      |
|    |                       | 10                          | 5    | 4    | 3    | 2    | 1 1/2 | 2     | 1 1/2 | 1 1/4 | 1    | 3/4  | 5/8  | 1/2  | 5/16 | 1/4  | 0    |
| NO | CEIL                  | 1                           | 7    | 61.1 | 51.1 | 51.4 | 60.7  | 62.0  | 62.4  | 62.7  | 63.0 | 63.4 | 63.4 | 63.7 | 63.7 | 63.7 | 63.7 |
| GE | 20000                 | 7                           | 61.1 | 51.1 | 51.4 | 61.7 | 63.0  | 63.4  | 63.7  | 64.0  | 64.4 | 64.4 | 64.4 | 64.7 | 64.7 | 64.7 | 64.7 |
| GE | 18000                 | 7                           | 51.1 | 51.1 | 61.4 | 61.7 | 63.0  | 63.4  | 63.7  | 64.0  | 64.4 | 64.4 | 64.4 | 64.7 | 64.7 | 64.7 | 64.7 |
| GE | 16000                 | 7                           | 51.1 | 51.1 | 51.4 | 61.7 | 63.0  | 63.4  | 63.7  | 64.0  | 64.4 | 64.4 | 64.4 | 64.7 | 64.7 | 64.7 | 64.7 |
| GE | 14000                 | 7                           | 61.1 | 51.1 | 51.4 | 61.7 | 63.0  | 63.4  | 63.7  | 64.0  | 64.4 | 64.4 | 64.4 | 64.7 | 64.7 | 64.7 | 64.7 |
| GE | 12000                 | 7                           | 61.1 | 51.1 | 51.4 | 61.7 | 63.0  | 63.4  | 63.7  | 64.0  | 64.4 | 64.4 | 64.4 | 64.7 | 64.7 | 64.7 | 64.7 |
| GE | 10000                 | 1.0                         | 76.2 | 76.2 | 76.6 | 76.9 | 78.5  | 79.9  | 79.9  | 79.9  | 80.2 | 80.2 | 80.2 | 80.5 | 80.5 | 80.5 | 80.5 |
| GE | 9000                  | 1.0                         | 76.2 | 76.2 | 76.6 | 76.9 | 78.5  | 79.9  | 79.9  | 79.9  | 80.2 | 80.2 | 80.2 | 80.5 | 80.5 | 80.5 | 80.5 |
| GE | 8000                  | 1.0                         | 76.2 | 76.2 | 76.6 | 76.9 | 78.5  | 79.9  | 79.9  | 79.9  | 80.2 | 80.2 | 80.2 | 80.5 | 80.5 | 80.5 | 80.5 |
| GE | 7000                  | 1.0                         | 76.2 | 76.2 | 76.6 | 76.9 | 78.5  | 79.9  | 79.9  | 79.9  | 80.2 | 80.2 | 80.2 | 80.5 | 80.5 | 80.5 | 80.5 |
| GE | 6000                  | 1.0                         | 76.2 | 76.2 | 76.6 | 76.9 | 78.5  | 79.9  | 79.9  | 79.9  | 80.2 | 80.2 | 80.2 | 80.5 | 80.5 | 80.5 | 80.5 |
| GE | 5000                  | 1.0                         | 79.9 | 79.9 | 79.9 | 80.5 | 82.0  | 82.5  | 83.2  | 83.5  | 83.8 | 83.8 | 83.8 | 84.2 | 84.2 | 84.2 | 84.2 |
| GE | 4500                  | 1.0                         | 79.9 | 79.9 | 79.9 | 80.5 | 82.0  | 82.5  | 83.2  | 83.5  | 83.8 | 83.8 | 83.8 | 84.2 | 84.2 | 84.2 | 84.2 |
| GE | 4000                  | 1.0                         | 83.8 | 83.8 | 84.2 | 84.8 | 86.5  | 86.8  | 87.5  | 87.8  | 88.1 | 88.1 | 88.1 | 88.4 | 88.4 | 88.4 | 88.4 |
| GE | 3500                  | 1.0                         | 83.8 | 83.8 | 84.2 | 84.8 | 86.5  | 86.8  | 87.5  | 87.8  | 88.1 | 88.1 | 88.1 | 88.4 | 88.4 | 88.4 | 88.4 |
| GE | 3000                  | 1.0                         | 84.5 | 84.5 | 84.8 | 85.5 | 87.8  | 88.1  | 88.8  | 89.1  | 89.4 | 89.4 | 89.4 | 89.8 | 89.8 | 89.8 | 89.8 |
| GE | 2500                  | 1.0                         | 85.2 | 85.2 | 86.1 | 86.8 | 89.4  | 89.8  | 90.4  | 90.9  | 91.1 | 91.1 | 91.1 | 91.4 | 91.4 | 91.4 | 91.4 |
| GE | 2000                  | 1.0                         | 86.1 | 86.1 | 86.5 | 87.1 | 90.4  | 90.8  | 91.4  | 91.7  | 92.1 | 92.1 | 92.1 | 92.4 | 92.4 | 92.4 | 92.4 |
| GE | 1800                  | 1.0                         | 86.1 | 86.1 | 86.5 | 87.1 | 90.4  | 90.8  | 91.4  | 91.7  | 92.1 | 92.1 | 92.1 | 92.4 | 92.4 | 92.4 | 92.4 |
| GE | 1600                  | 1.0                         | 87.5 | 87.5 | 87.9 | 88.4 | 91.7  | 92.1  | 92.7  | 93.1  | 93.4 | 93.4 | 93.4 | 93.7 | 93.7 | 93.7 | 93.7 |
| GE | 1400                  | 1.0                         | 88.8 | 88.8 | 89.1 | 89.5 | 93.7  | 94.1  | 94.7  | 95.4  | 95.7 | 95.7 | 95.7 | 96.0 | 96.0 | 96.0 | 96.0 |
| GE | 1200                  | 1.0                         | 89.4 | 89.4 | 89.4 | 89.9 | 94.7  | 95.0  | 95.7  | 96    | 96.3 | 96.3 | 96.3 | 96.7 | 96.7 | 96.7 | 96.7 |
| GE | 1000                  | 1.0                         | 89.4 | 89.4 | 89.4 | 89.9 | 94.7  | 95.0  | 95.7  | 96    | 96.3 | 96.3 | 96.3 | 96.7 | 96.7 | 96.7 | 96.7 |
| GE | 900                   | 1.0                         | 89.4 | 89.4 | 89.4 | 89.9 | 94.7  | 95.0  | 95.7  | 96    | 96.3 | 96.3 | 96.3 | 96.7 | 96.7 | 96.7 | 96.7 |
| GE | 800                   | 1.0                         | 89.4 | 89.4 | 89.4 | 89.9 | 94.7  | 95.0  | 95.7  | 96    | 96.3 | 96.3 | 96.3 | 96.7 | 96.7 | 96.7 | 96.7 |
| GE | 700                   | 1.0                         | 89.4 | 89.4 | 89.4 | 89.9 | 94.7  | 95.0  | 95.7  | 96    | 96.3 | 96.3 | 96.3 | 96.7 | 96.7 | 96.7 | 96.7 |
| GE | 600                   | 1.0                         | 89.4 | 89.4 | 89.4 | 89.9 | 94.7  | 95.0  | 95.7  | 96    | 96.3 | 96.3 | 96.3 | 96.7 | 96.7 | 96.7 | 96.7 |
| GE | 500                   | 1.0                         | 89.4 | 89.4 | 89.4 | 89.9 | 94.7  | 95.0  | 95.7  | 96    | 96.3 | 96.3 | 96.3 | 96.7 | 96.7 | 96.7 | 96.7 |
| GE | 400                   | 1.0                         | 89.4 | 89.4 | 89.4 | 89.9 | 94.7  | 95.0  | 95.7  | 96    | 96.3 | 96.3 | 96.3 | 96.7 | 96.7 | 96.7 | 96.7 |
| GE | 300                   | 1.0                         | 89.4 | 89.4 | 89.4 | 89.9 | 94.7  | 95.0  | 95.7  | 96    | 96.3 | 96.3 | 96.3 | 96.7 | 96.7 | 96.7 | 96.7 |
| GE | 200                   | 1.0                         | 89.4 | 89.4 | 89.4 | 89.9 | 94.7  | 95.0  | 95.7  | 96    | 96.3 | 96.3 | 96.3 | 96.7 | 96.7 | 96.7 | 96.7 |
| GE | 100                   | 1.0                         | 89.4 | 89.4 | 89.4 | 89.9 | 94.7  | 95.0  | 95.7  | 96    | 96.3 | 96.3 | 96.3 | 96.7 | 96.7 | 96.7 | 96.7 |
| GE | 0                     | 1.0                         | 89.4 | 89.4 | 89.4 | 89.9 | 94.7  | 95.0  | 95.7  | 96    | 96.3 | 96.3 | 96.3 | 96.7 | 96.7 | 96.7 | 96.7 |

TOTAL NUMBER OF OBSERVATIONS: 723

GLOBAL CLIMATOLOGY BRANCH  
USAF/CLAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 250907 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87

MONTH: JUL

HOURS(EST): 0300-0500

| CEILING<br>IN<br>FEET | VISIBILITY IN STATUTE MILES |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-----------------------|-----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|                       | 1                           | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17   |
| NO CEIL               | 50.5                        | 50.5 | 50.5 | 51.5 | 51.7 | 56.4 | 57.4 | 59.0 | 59.0 | 59.5 | 59.5 | 59.7 | 60.0 | 60.0 | 61.0 | 61.0 | 61.0 |
| GE 20000              | 51.4                        | 51.4 | 51.5 | 52.5 | 57.0 | 57.7 | 58.7 | 60.7 | 60.7 | 60.7 | 61.0 | 61.3 | 61.6 | 61.6 | 63.0 | 63.0 | 63.0 |
| GE 18000              | 51.4                        | 51.4 | 51.5 | 52.5 | 57.0 | 57.7 | 58.7 | 60.7 | 60.7 | 60.7 | 61.0 | 61.3 | 61.6 | 61.6 | 63.0 | 63.0 | 63.0 |
| GE 16000              | 51.4                        | 51.4 | 51.5 | 52.5 | 57.0 | 57.7 | 58.7 | 60.7 | 60.7 | 60.7 | 61.0 | 61.3 | 61.6 | 61.6 | 63.0 | 63.0 | 63.0 |
| GE 14000              | 51.4                        | 51.4 | 51.5 | 52.5 | 57.0 | 57.7 | 58.7 | 60.7 | 60.7 | 60.7 | 61.0 | 61.3 | 61.6 | 61.6 | 63.0 | 63.0 | 63.0 |
| GE 12000              | 51.4                        | 51.4 | 51.5 | 52.5 | 57.0 | 57.7 | 58.7 | 60.7 | 60.7 | 60.7 | 61.0 | 61.3 | 61.6 | 61.6 | 63.0 | 63.0 | 63.0 |
| GE 10000              | 62.6                        | 62.6 | 63.5 | 64.9 | 70.6 | 71.5 | 72.5 | 74.4 | 74.4 | 74.4 | 75.1 | 75.4 | 75.7 | 75.7 | 77.4 | 77.4 | 77.4 |
| GE 9000               | 62.6                        | 62.6 | 63.5 | 64.9 | 70.6 | 71.5 | 72.5 | 74.4 | 74.4 | 74.4 | 75.1 | 75.4 | 75.7 | 75.7 | 77.4 | 77.4 | 77.4 |
| GE 8000               | 62.6                        | 62.6 | 63.5 | 64.9 | 70.6 | 71.5 | 72.5 | 74.4 | 74.4 | 74.4 | 75.1 | 75.4 | 75.7 | 75.7 | 77.4 | 77.4 | 77.4 |
| GE 7000               | 62.6                        | 62.6 | 63.5 | 64.9 | 70.6 | 71.5 | 72.5 | 74.4 | 74.4 | 74.4 | 75.1 | 75.4 | 75.7 | 75.7 | 77.4 | 77.4 | 77.4 |
| GE 6000               | 62.6                        | 62.6 | 63.5 | 64.9 | 70.6 | 71.5 | 72.5 | 74.4 | 74.4 | 74.4 | 75.1 | 75.4 | 75.7 | 75.7 | 77.4 | 77.4 | 77.4 |
| GE 5000               | 65.6                        | 65.6 | 66.9 | 68.2 | 74.2 | 75.4 | 76.4 | 78.4 | 78.4 | 78.4 | 79.7 | 79.7 | 79.7 | 79.7 | 81.3 | 81.3 | 81.3 |
| GE 4000               | 65.6                        | 65.6 | 66.9 | 68.2 | 74.2 | 75.4 | 76.4 | 78.4 | 78.4 | 78.4 | 79.7 | 79.7 | 79.7 | 79.7 | 81.3 | 81.3 | 81.3 |
| GE 3000               | 70.6                        | 70.6 | 71.5 | 73.4 | 80.7 | 81.3 | 82.5 | 84.6 | 84.6 | 84.6 | 85.9 | 85.9 | 85.9 | 85.9 | 87.5 | 87.5 | 87.5 |
| GE 2000               | 72.1                        | 72.1 | 72.5 | 74.9 | 82.0 | 82.6 | 83.6 | 86.2 | 86.2 | 86.2 | 87.5 | 87.5 | 87.5 | 87.5 | 89.2 | 89.2 | 89.2 |
| GE 1800               | 74.1                        | 74.1 | 74.4 | 76.7 | 84.3 | 84.9 | 85.9 | 89.2 | 89.2 | 89.2 | 90.5 | 90.5 | 90.5 | 90.5 | 92.1 | 92.1 | 92.1 |
| GE 1600               | 75.7                        | 75.7 | 76.1 | 78.4 | 86.2 | 86.9 | 87.9 | 91.1 | 91.1 | 91.1 | 91.5 | 91.5 | 91.5 | 91.5 | 93.1 | 93.1 | 93.1 |
| GE 1400               | 75.7                        | 75.7 | 76.1 | 78.4 | 86.2 | 86.9 | 87.9 | 91.1 | 91.1 | 91.1 | 91.5 | 91.5 | 91.5 | 91.5 | 93.1 | 93.1 | 93.1 |
| GE 1200               | 76.4                        | 76.4 | 76.7 | 79.7 | 86.9 | 87.5 | 88.5 | 91.8 | 91.8 | 91.8 | 92.1 | 92.1 | 92.1 | 92.1 | 93.1 | 93.1 | 93.1 |
| GE 1000               | 77.7                        | 77.7 | 78.0 | 80.3 | 88.2 | 88.9 | 89.8 | 93.1 | 93.1 | 93.1 | 93.4 | 93.4 | 93.4 | 93.4 | 94.1 | 94.1 | 94.1 |
| GE 900                | 78.1                        | 78.1 | 78.3 | 81.6 | 89.8 | 90.5 | 91.5 | 95.1 | 95.1 | 95.1 | 95.4 | 95.4 | 95.4 | 95.4 | 96.4 | 96.4 | 96.4 |
| GE 800                | 78.1                        | 78.1 | 78.3 | 81.6 | 89.8 | 90.5 | 91.5 | 95.1 | 95.1 | 95.1 | 95.4 | 95.4 | 95.4 | 95.4 | 96.4 | 96.4 | 96.4 |
| GE 700                | 78.1                        | 78.1 | 78.3 | 81.6 | 89.8 | 90.5 | 91.5 | 95.1 | 95.1 | 95.1 | 95.4 | 95.4 | 95.4 | 95.4 | 96.4 | 96.4 | 96.4 |
| GE 600                | 78.1                        | 78.1 | 78.3 | 81.6 | 89.8 | 90.5 | 91.5 | 95.1 | 95.1 | 95.1 | 95.4 | 95.4 | 95.4 | 95.4 | 96.4 | 96.4 | 96.4 |
| GE 500                | 78.1                        | 78.1 | 78.3 | 81.6 | 89.8 | 90.5 | 91.5 | 95.1 | 95.1 | 95.1 | 95.4 | 95.4 | 95.4 | 95.4 | 96.4 | 96.4 | 96.4 |
| GE 400                | 78.1                        | 78.1 | 78.3 | 81.6 | 89.8 | 90.5 | 91.5 | 95.1 | 95.1 | 95.1 | 95.4 | 95.4 | 95.4 | 95.4 | 96.4 | 96.4 | 96.4 |
| GE 300                | 78.1                        | 78.1 | 78.3 | 81.6 | 89.8 | 90.5 | 91.5 | 95.1 | 95.1 | 95.1 | 95.4 | 95.4 | 95.4 | 95.4 | 96.4 | 96.4 | 96.4 |
| GE 200                | 78.1                        | 78.1 | 78.3 | 81.6 | 89.8 | 90.5 | 91.5 | 95.1 | 95.1 | 95.1 | 95.4 | 95.4 | 95.4 | 95.4 | 96.4 | 96.4 | 96.4 |
| GE 100                | 78.1                        | 78.1 | 78.3 | 81.6 | 89.8 | 90.5 | 91.5 | 95.1 | 95.1 | 95.1 | 95.4 | 95.4 | 95.4 | 95.4 | 96.4 | 96.4 | 96.4 |

TOTAL NUMBER OF OBSERVATIONS: 104

PERCENTAGE FREQUENCY OF OCCURRENCE OF UTILING VERSUS VIABILITY  
FROM HOURLY OBSERVATIONS

DATE OF RECORD: 75-87  
MONTH: JUL      HOURS(DST): 0600-0600

[illegible]

TOTAL NUMBER OF OBSERVATIONS: 101

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAG

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275950 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 75-87  
MONTH: JUL HOURS(IST): 0900-1100

| CEILING<br>IN<br>FEET | VISIBILITY IN STATUTE MILES |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |
|-----------------------|-----------------------------|---------|---------|---------|---------|---------|---------|---------|---------|----------|----------|----------|----------|----------|----------|----------|
|                       | GE<br>1                     | GE<br>2 | GE<br>3 | GE<br>4 | GE<br>5 | GE<br>6 | GE<br>7 | GE<br>8 | GE<br>9 | GE<br>10 | GE<br>11 | GE<br>12 | GE<br>13 | GE<br>14 | GE<br>15 | GE<br>16 |
| NO CEIL               | 1.3                         | 53.3    | 53.3    | 53.3    | 54.0    | 54.0    | 54.0    | 54.0    | 54.0    | 54.0     | 54.0     | 54.0     | 54.0     | 54.0     | 54.0     | 54.0     |
| GE 10000              | 1.3                         | 55.6    | 55.6    | 55.6    | 56.6    | 56.6    | 56.6    | 56.6    | 56.6    | 56.6     | 56.6     | 56.6     | 56.6     | 56.6     | 56.6     | 56.6     |
| GE 18000              | 1.3                         | 55.6    | 55.6    | 55.6    | 56.6    | 56.6    | 56.6    | 56.6    | 56.6    | 56.6     | 56.6     | 56.6     | 56.6     | 56.6     | 56.6     | 56.6     |
| GE 16000              | 1.3                         | 55.6    | 55.6    | 55.6    | 56.6    | 56.6    | 56.6    | 56.6    | 56.6    | 56.6     | 56.6     | 56.6     | 56.6     | 56.6     | 56.6     | 56.6     |
| GE 14000              | 1.3                         | 55.6    | 55.6    | 55.6    | 56.6    | 56.6    | 56.6    | 56.6    | 56.6    | 56.6     | 56.6     | 56.6     | 56.6     | 56.6     | 56.6     | 56.6     |
| GE 12000              | 1.3                         | 55.6    | 55.6    | 55.6    | 56.6    | 56.6    | 56.6    | 56.6    | 56.6    | 56.6     | 56.6     | 56.6     | 56.6     | 56.6     | 56.6     | 56.6     |
| GE 10000              | 1.7                         | 72.2    | 72.2    | 73.3    | 75.2    | 76.2    | 76.2    | 76.2    | 76.2    | 76.2     | 76.2     | 76.2     | 76.2     | 76.2     | 76.2     | 76.2     |
| GE 9000               | 1.7                         | 72.2    | 72.2    | 73.3    | 75.2    | 76.2    | 76.2    | 76.2    | 76.2    | 76.2     | 76.2     | 76.2     | 76.2     | 76.2     | 76.2     | 76.2     |
| GE 8000               | 1.7                         | 72.2    | 72.2    | 73.3    | 75.2    | 76.2    | 76.2    | 76.2    | 76.2    | 76.2     | 76.2     | 76.2     | 76.2     | 76.2     | 76.2     | 76.2     |
| GE 7000               | 1.7                         | 72.2    | 72.2    | 73.3    | 75.2    | 76.2    | 76.2    | 76.2    | 76.2    | 76.2     | 76.2     | 76.2     | 76.2     | 76.2     | 76.2     | 76.2     |
| GE 6000               | 1.7                         | 74.2    | 74.2    | 74.2    | 75.5    | 76.5    | 76.5    | 76.5    | 76.5    | 76.5     | 76.5     | 76.5     | 76.5     | 76.5     | 76.5     | 76.5     |
| GE 5000               | 1.7                         | 77.2    | 77.2    | 77.2    | 78.5    | 79.5    | 79.5    | 79.5    | 79.5    | 79.5     | 79.5     | 79.5     | 79.5     | 79.5     | 79.5     | 79.5     |
| GE 4500               | 1.7                         | 77.2    | 77.2    | 77.2    | 78.5    | 79.5    | 79.5    | 79.5    | 79.5    | 79.5     | 79.5     | 79.5     | 79.5     | 79.5     | 79.5     | 79.5     |
| GE 4000               | 1.7                         | 80.2    | 80.2    | 80.2    | 81.1    | 82.1    | 83.1    | 83.1    | 83.1    | 83.1     | 83.1     | 83.1     | 83.1     | 83.1     | 83.1     | 83.1     |
| GE 3500               | 1.7                         | 81.1    | 81.1    | 81.1    | 82.1    | 83.1    | 83.1    | 83.1    | 83.1    | 83.1     | 83.1     | 83.1     | 83.1     | 83.1     | 83.1     | 83.1     |
| GE 3000               | 1.7                         | 81.1    | 81.1    | 81.1    | 82.1    | 83.1    | 83.1    | 83.1    | 83.1    | 83.1     | 83.1     | 83.1     | 83.1     | 83.1     | 83.1     | 83.1     |
| GE 2500               | 1.7                         | 84.2    | 84.2    | 84.2    | 86.1    | 87.4    | 87.4    | 87.4    | 87.4    | 87.4     | 87.4     | 87.4     | 87.4     | 87.4     | 87.4     | 87.4     |
| GE 2000               | 1.7                         | 86.4    | 86.4    | 86.4    | 87.7    | 89.1    | 89.1    | 89.1    | 89.1    | 89.1     | 89.1     | 89.1     | 89.1     | 89.1     | 89.1     | 89.1     |
| GE 1800               | 1.7                         | 86.4    | 86.4    | 86.4    | 87.7    | 89.1    | 89.1    | 89.1    | 89.1    | 89.1     | 89.1     | 89.1     | 89.1     | 89.1     | 89.1     | 89.1     |
| GE 1600               | 1.7                         | 87.7    | 87.7    | 87.7    | 89.1    | 90.4    | 90.4    | 90.4    | 90.4    | 90.4     | 90.4     | 90.4     | 90.4     | 90.4     | 90.4     | 90.4     |
| GE 1400               | 1.7                         | 87.7    | 87.7    | 87.7    | 89.1    | 90.4    | 90.4    | 90.4    | 90.4    | 90.4     | 90.4     | 90.4     | 90.4     | 90.4     | 90.4     | 90.4     |
| GE 1200               | 1.7                         | 87.7    | 87.7    | 87.7    | 89.1    | 90.4    | 90.4    | 90.4    | 90.4    | 90.4     | 90.4     | 90.4     | 90.4     | 90.4     | 90.4     | 90.4     |
| GE 1000               | 1.7                         | 87.7    | 87.7    | 87.7    | 89.1    | 90.4    | 90.4    | 90.4    | 90.4    | 90.4     | 90.4     | 90.4     | 90.4     | 90.4     | 90.4     | 90.4     |
| GE 900                | 1.7                         | 87.7    | 87.7    | 87.7    | 89.1    | 90.4    | 90.4    | 90.4    | 90.4    | 90.4     | 90.4     | 90.4     | 90.4     | 90.4     | 90.4     | 90.4     |
| GE 800                | 1.7                         | 87.7    | 87.7    | 87.7    | 89.1    | 90.4    | 90.4    | 90.4    | 90.4    | 90.4     | 90.4     | 90.4     | 90.4     | 90.4     | 90.4     | 90.4     |
| GE 700                | 1.7                         | 87.7    | 87.7    | 87.7    | 89.1    | 90.4    | 90.4    | 90.4    | 90.4    | 90.4     | 90.4     | 90.4     | 90.4     | 90.4     | 90.4     | 90.4     |
| GE 600                | 1.7                         | 87.7    | 87.7    | 87.7    | 89.1    | 90.4    | 90.4    | 90.4    | 90.4    | 90.4     | 90.4     | 90.4     | 90.4     | 90.4     | 90.4     | 90.4     |
| GE 500                | 1.7                         | 87.7    | 87.7    | 87.7    | 89.1    | 90.4    | 90.4    | 90.4    | 90.4    | 90.4     | 90.4     | 90.4     | 90.4     | 90.4     | 90.4     | 90.4     |
| GE 400                | 1.7                         | 87.7    | 87.7    | 87.7    | 89.1    | 90.4    | 90.4    | 90.4    | 90.4    | 90.4     | 90.4     | 90.4     | 90.4     | 90.4     | 90.4     | 90.4     |
| GE 300                | 1.7                         | 87.7    | 87.7    | 87.7    | 89.1    | 90.4    | 90.4    | 90.4    | 90.4    | 90.4     | 90.4     | 90.4     | 90.4     | 90.4     | 90.4     | 90.4     |
| GE 200                | 1.7                         | 87.7    | 87.7    | 87.7    | 89.1    | 90.4    | 90.4    | 90.4    | 90.4    | 90.4     | 90.4     | 90.4     | 90.4     | 90.4     | 90.4     | 90.4     |
| GE 100                | 1.7                         | 87.7    | 87.7    | 87.7    | 89.1    | 90.4    | 90.4    | 90.4    | 90.4    | 90.4     | 90.4     | 90.4     | 90.4     | 90.4     | 90.4     | 90.4     |
| GE 0                  | 1.7                         | 87.7    | 87.7    | 87.7    | 89.1    | 90.4    | 90.4    | 90.4    | 90.4    | 90.4     | 90.4     | 90.4     | 90.4     | 90.4     | 90.4     | 90.4     |

TOTAL NUMBER OF OBSERVATIONS: 700

GLOBAL CLIMATOLOGY BRANCH  
USAF/STAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 27581 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: JUL HOURS/LSST: 1200-1400

| CEILING<br>IN<br>FEET | VISIBILITY IN STATUTE MILES |      |      |      |      |      |      |      |      |      |       |       |       |       |       |       |
|-----------------------|-----------------------------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|
|                       | 1                           | GE 1 | GE 2 | GE 3 | GE 4 | GE 5 | GE 6 | GE 7 | GE 8 | GE 9 | GE 10 | GE 11 | GE 12 | GE 13 | GE 14 | GE 15 |
| NO CEIL               | 1                           | 47.4 | 47.4 | 47.4 | 47.4 | 47.4 | 47.4 | 47.4 | 47.4 | 47.4 | 47.4  | 47.4  | 47.4  | 47.4  | 47.4  | 47.4  |
| GE 2000               | 1                           | 44.5 | 44.5 | 44.5 | 44.5 | 44.5 | 44.5 | 44.5 | 44.5 | 44.5 | 44.5  | 44.5  | 44.5  | 44.5  | 44.5  | 44.5  |
| GE 1800               | 1                           | 44.5 | 44.5 | 44.5 | 44.5 | 44.5 | 44.5 | 44.5 | 44.5 | 44.5 | 44.5  | 44.5  | 44.5  | 44.5  | 44.5  | 44.5  |
| GE 1600               | 1                           | 44.5 | 44.5 | 44.5 | 44.5 | 44.5 | 44.5 | 44.5 | 44.5 | 44.5 | 44.5  | 44.5  | 44.5  | 44.5  | 44.5  | 44.5  |
| GE 1400               | 1                           | 44.5 | 44.5 | 44.5 | 44.5 | 44.5 | 44.5 | 44.5 | 44.5 | 44.5 | 44.5  | 44.5  | 44.5  | 44.5  | 44.5  | 44.5  |
| GE 1200               | 1                           | 44.5 | 44.5 | 44.5 | 44.5 | 44.5 | 44.5 | 44.5 | 44.5 | 44.5 | 44.5  | 44.5  | 44.5  | 44.5  | 44.5  | 44.5  |
| GE 1000               | 1                           | 57.2 | 57.2 | 57.2 | 57.2 | 57.2 | 57.2 | 57.2 | 57.2 | 57.2 | 57.2  | 57.2  | 57.2  | 57.2  | 57.2  | 57.2  |
| GE 900                | 1                           | 57.2 | 57.2 | 57.2 | 57.2 | 57.2 | 57.2 | 57.2 | 57.2 | 57.2 | 57.2  | 57.2  | 57.2  | 57.2  | 57.2  | 57.2  |
| GE 800                | 1                           | 57.2 | 57.2 | 57.2 | 57.2 | 57.2 | 57.2 | 57.2 | 57.2 | 57.2 | 57.2  | 57.2  | 57.2  | 57.2  | 57.2  | 57.2  |
| GE 700                | 1                           | 57.2 | 57.2 | 57.2 | 57.2 | 57.2 | 57.2 | 57.2 | 57.2 | 57.2 | 57.2  | 57.2  | 57.2  | 57.2  | 57.2  | 57.2  |
| GE 600                | 1                           | 57.2 | 57.2 | 57.2 | 57.2 | 57.2 | 57.2 | 57.2 | 57.2 | 57.2 | 57.2  | 57.2  | 57.2  | 57.2  | 57.2  | 57.2  |
| GE 500                | 1                           | 65.2 | 65.2 | 65.2 | 65.2 | 65.2 | 65.2 | 65.2 | 65.2 | 65.2 | 65.2  | 65.2  | 65.2  | 65.2  | 65.2  | 65.2  |
| GE 400                | 1                           | 72.3 | 72.3 | 72.3 | 72.3 | 72.3 | 72.3 | 72.3 | 72.3 | 72.3 | 72.3  | 72.3  | 72.3  | 72.3  | 72.3  | 72.3  |
| GE 350                | 1                           | 72.3 | 72.3 | 72.3 | 72.3 | 72.3 | 72.3 | 72.3 | 72.3 | 72.3 | 72.3  | 72.3  | 72.3  | 72.3  | 72.3  | 72.3  |
| GE 300                | 1                           | 82.3 | 82.3 | 82.3 | 82.3 | 82.3 | 82.3 | 82.3 | 82.3 | 82.3 | 82.3  | 82.3  | 82.3  | 82.3  | 82.3  | 82.3  |
| GE 250                | 1                           | 89.6 | 89.6 | 89.6 | 89.6 | 89.6 | 89.6 | 89.6 | 89.6 | 89.6 | 89.6  | 89.6  | 89.6  | 89.6  | 89.6  | 89.6  |
| GE 200                | 1                           | 93.3 | 93.3 | 93.3 | 93.3 | 93.3 | 93.3 | 93.3 | 93.3 | 93.3 | 93.3  | 93.3  | 93.3  | 93.3  | 93.3  | 93.3  |
| GE 180                | 1                           | 94.6 | 94.6 | 94.6 | 94.6 | 94.6 | 94.6 | 94.6 | 94.6 | 94.6 | 94.6  | 94.6  | 94.6  | 94.6  | 94.6  | 94.6  |
| GE 160                | 1                           | 96.3 | 96.3 | 96.3 | 96.3 | 96.3 | 96.3 | 96.3 | 96.3 | 96.3 | 96.3  | 96.3  | 96.3  | 96.3  | 96.3  | 96.3  |
| GE 140                | 1                           | 97.7 | 97.7 | 97.7 | 97.7 | 97.7 | 97.7 | 97.7 | 97.7 | 97.7 | 97.7  | 97.7  | 97.7  | 97.7  | 97.7  | 97.7  |
| GE 120                | 1                           | 98.3 | 98.3 | 98.3 | 98.3 | 98.3 | 98.3 | 98.3 | 98.3 | 98.3 | 98.3  | 98.3  | 98.3  | 98.3  | 98.3  | 98.3  |
| GE 100                | 1                           | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 | 99.3  | 99.3  | 99.3  | 99.3  | 99.3  | 99.3  |
| GE 90                 | 1                           | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 | 99.3  | 99.3  | 99.3  | 99.3  | 99.3  | 99.3  |
| GE 80                 | 1                           | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 | 99.3  | 99.3  | 99.3  | 99.3  | 99.3  | 99.3  |
| GE 70                 | 1                           | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 | 99.3  | 99.3  | 99.3  | 99.3  | 99.3  | 99.3  |
| GE 60                 | 1                           | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 | 99.3  | 99.3  | 99.3  | 99.3  | 99.3  | 99.3  |
| GE 50                 | 1                           | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 | 99.3  | 99.3  | 99.3  | 99.3  | 99.3  | 99.3  |
| GE 40                 | 1                           | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 | 99.3  | 99.3  | 99.3  | 99.3  | 99.3  | 99.3  |
| GE 30                 | 1                           | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 | 99.3  | 99.3  | 99.3  | 99.3  | 99.3  | 99.3  |
| GE 20                 | 1                           | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 | 99.3  | 99.3  | 99.3  | 99.3  | 99.3  | 99.3  |
| GE 10                 | 1                           | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 | 99.3  | 99.3  | 99.3  | 99.3  | 99.3  | 99.3  |
| GE 0                  | 1                           | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 | 99.3  | 99.3  | 99.3  | 99.3  | 99.3  | 99.3  |

TOTAL NUMBER OF OBSERVATIONS: 299

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM FOURLY OBSERVATIONS

REPORT OF RECORD: 78-87  
DATE: JUL      HOURS(EST): 15:0-1700

TOTAL NUMBER OF OBSERVATIONS: 240

1

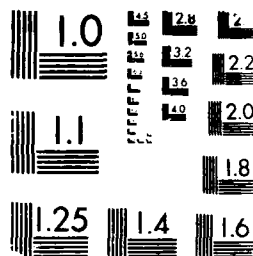
AD-A196 644

KAZAN USSR LIMITED SURFACE OBSERVATIONS CLIMATIC  
SUMMARY (LISACS) PARTS 8-10 (U) AIR FORCE ENVIRONMENTAL  
TECHNICAL APPLICATIONS CENTER SCOTT AFB IL JUN 88  
UNCLASSIFIED USAFETAC/DS-88/027

3/3

NL

END  
9-10  
9-10



MICROCOPY RESOLUTION TEST CHART

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275951 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: JUL HOURS(UTC): 1800-2000

| CEILING |       |       |       | VISIBILITY IN STATUTE MILES |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |
|---------|-------|-------|-------|-----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| IN FEET | 1     | 2     | 3     | 4                           | 5     | 6     | 7     | 8     | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    | 20    |
| 50      | 50.1  | 50.2  | 50.3  | 50.4                        | 50.5  | 50.6  | 50.7  | 50.8  | 50.9  | 51.0  | 51.1  | 51.2  | 51.3  | 51.4  | 51.5  | 51.6  | 51.7  | 51.8  | 51.9  | 52.0  |
| 55      | 55.1  | 55.2  | 55.3  | 55.4                        | 55.5  | 55.6  | 55.7  | 55.8  | 55.9  | 56.0  | 56.1  | 56.2  | 56.3  | 56.4  | 56.5  | 56.6  | 56.7  | 56.8  | 56.9  | 57.0  |
| 60      | 60.1  | 60.2  | 60.3  | 60.4                        | 60.5  | 60.6  | 60.7  | 60.8  | 60.9  | 61.0  | 61.1  | 61.2  | 61.3  | 61.4  | 61.5  | 61.6  | 61.7  | 61.8  | 61.9  | 62.0  |
| 65      | 65.1  | 65.2  | 65.3  | 65.4                        | 65.5  | 65.6  | 65.7  | 65.8  | 65.9  | 66.0  | 66.1  | 66.2  | 66.3  | 66.4  | 66.5  | 66.6  | 66.7  | 66.8  | 66.9  | 67.0  |
| 70      | 70.1  | 70.2  | 70.3  | 70.4                        | 70.5  | 70.6  | 70.7  | 70.8  | 70.9  | 71.0  | 71.1  | 71.2  | 71.3  | 71.4  | 71.5  | 71.6  | 71.7  | 71.8  | 71.9  | 72.0  |
| 75      | 75.1  | 75.2  | 75.3  | 75.4                        | 75.5  | 75.6  | 75.7  | 75.8  | 75.9  | 76.0  | 76.1  | 76.2  | 76.3  | 76.4  | 76.5  | 76.6  | 76.7  | 76.8  | 76.9  | 77.0  |
| 80      | 80.1  | 80.2  | 80.3  | 80.4                        | 80.5  | 80.6  | 80.7  | 80.8  | 80.9  | 81.0  | 81.1  | 81.2  | 81.3  | 81.4  | 81.5  | 81.6  | 81.7  | 81.8  | 81.9  | 82.0  |
| 85      | 85.1  | 85.2  | 85.3  | 85.4                        | 85.5  | 85.6  | 85.7  | 85.8  | 85.9  | 86.0  | 86.1  | 86.2  | 86.3  | 86.4  | 86.5  | 86.6  | 86.7  | 86.8  | 86.9  | 87.0  |
| 90      | 90.1  | 90.2  | 90.3  | 90.4                        | 90.5  | 90.6  | 90.7  | 90.8  | 90.9  | 91.0  | 91.1  | 91.2  | 91.3  | 91.4  | 91.5  | 91.6  | 91.7  | 91.8  | 91.9  | 92.0  |
| 95      | 95.1  | 95.2  | 95.3  | 95.4                        | 95.5  | 95.6  | 95.7  | 95.8  | 95.9  | 96.0  | 96.1  | 96.2  | 96.3  | 96.4  | 96.5  | 96.6  | 96.7  | 96.8  | 96.9  | 97.0  |
| 100     | 100.1 | 100.2 | 100.3 | 100.4                       | 100.5 | 100.6 | 100.7 | 100.8 | 100.9 | 101.0 | 101.1 | 101.2 | 101.3 | 101.4 | 101.5 | 101.6 | 101.7 | 101.8 | 101.9 | 102.0 |
| 105     | 105.1 | 105.2 | 105.3 | 105.4                       | 105.5 | 105.6 | 105.7 | 105.8 | 105.9 | 106.0 | 106.1 | 106.2 | 106.3 | 106.4 | 106.5 | 106.6 | 106.7 | 106.8 | 106.9 | 107.0 |
| 110     | 110.1 | 110.2 | 110.3 | 110.4                       | 110.5 | 110.6 | 110.7 | 110.8 | 110.9 | 111.0 | 111.1 | 111.2 | 111.3 | 111.4 | 111.5 | 111.6 | 111.7 | 111.8 | 111.9 | 112.0 |
| 115     | 115.1 | 115.2 | 115.3 | 115.4                       | 115.5 | 115.6 | 115.7 | 115.8 | 115.9 | 116.0 | 116.1 | 116.2 | 116.3 | 116.4 | 116.5 | 116.6 | 116.7 | 116.8 | 116.9 | 117.0 |
| 120     | 120.1 | 120.2 | 120.3 | 120.4                       | 120.5 | 120.6 | 120.7 | 120.8 | 120.9 | 121.0 | 121.1 | 121.2 | 121.3 | 121.4 | 121.5 | 121.6 | 121.7 | 121.8 | 121.9 | 122.0 |
| 125     | 125.1 | 125.2 | 125.3 | 125.4                       | 125.5 | 125.6 | 125.7 | 125.8 | 125.9 | 126.0 | 126.1 | 126.2 | 126.3 | 126.4 | 126.5 | 126.6 | 126.7 | 126.8 | 126.9 | 127.0 |
| 130     | 130.1 | 130.2 | 130.3 | 130.4                       | 130.5 | 130.6 | 130.7 | 130.8 | 130.9 | 131.0 | 131.1 | 131.2 | 131.3 | 131.4 | 131.5 | 131.6 | 131.7 | 131.8 | 131.9 | 132.0 |
| 135     | 135.1 | 135.2 | 135.3 | 135.4                       | 135.5 | 135.6 | 135.7 | 135.8 | 135.9 | 136.0 | 136.1 | 136.2 | 136.3 | 136.4 | 136.5 | 136.6 | 136.7 | 136.8 | 136.9 | 137.0 |
| 140     | 140.1 | 140.2 | 140.3 | 140.4                       | 140.5 | 140.6 | 140.7 | 140.8 | 140.9 | 141.0 | 141.1 | 141.2 | 141.3 | 141.4 | 141.5 | 141.6 | 141.7 | 141.8 | 141.9 | 142.0 |
| 145     | 145.1 | 145.2 | 145.3 | 145.4                       | 145.5 | 145.6 | 145.7 | 145.8 | 145.9 | 146.0 | 146.1 | 146.2 | 146.3 | 146.4 | 146.5 | 146.6 | 146.7 | 146.8 | 146.9 | 147.0 |
| 150     | 150.1 | 150.2 | 150.3 | 150.4                       | 150.5 | 150.6 | 150.7 | 150.8 | 150.9 | 151.0 | 151.1 | 151.2 | 151.3 | 151.4 | 151.5 | 151.6 | 151.7 | 151.8 | 151.9 | 152.0 |
| 155     | 155.1 | 155.2 | 155.3 | 155.4                       | 155.5 | 155.6 | 155.7 | 155.8 | 155.9 | 156.0 | 156.1 | 156.2 | 156.3 | 156.4 | 156.5 | 156.6 | 156.7 | 156.8 | 156.9 | 157.0 |
| 160     | 160.1 | 160.2 | 160.3 | 160.4                       | 160.5 | 160.6 | 160.7 | 160.8 | 160.9 | 161.0 | 161.1 | 161.2 | 161.3 | 161.4 | 161.5 | 161.6 | 161.7 | 161.8 | 161.9 | 162.0 |
| 165     | 165.1 | 165.2 | 165.3 | 165.4                       | 165.5 | 165.6 | 165.7 | 165.8 | 165.9 | 166.0 | 166.1 | 166.2 | 166.3 | 166.4 | 166.5 | 166.6 | 166.7 | 166.8 | 166.9 | 167.0 |
| 170     | 170.1 | 170.2 | 170.3 | 170.4                       | 170.5 | 170.6 | 170.7 | 170.8 | 170.9 | 171.0 | 171.1 | 171.2 | 171.3 | 171.4 | 171.5 | 171.6 | 171.7 | 171.8 | 171.9 | 172.0 |
| 175     | 175.1 | 175.2 | 175.3 | 175.4                       | 175.5 | 175.6 | 175.7 | 175.8 | 175.9 | 176.0 | 176.1 | 176.2 | 176.3 | 176.4 | 176.5 | 176.6 | 176.7 | 176.8 | 176.9 | 177.0 |
| 180     | 180.1 | 180.2 | 180.3 | 180.4                       | 180.5 | 180.6 | 180.7 | 180.8 | 180.9 | 181.0 | 181.1 | 181.2 | 181.3 | 181.4 | 181.5 | 181.6 | 181.7 | 181.8 | 181.9 | 182.0 |
| 185     | 185.1 | 185.2 | 185.3 | 185.4                       | 185.5 | 185.6 | 185.7 | 185.8 | 185.9 | 186.0 | 186.1 | 186.2 | 186.3 | 186.4 | 186.5 | 186.6 | 186.7 | 186.8 | 186.9 | 187.0 |
| 190     | 190.1 | 190.2 | 190.3 | 190.4                       | 190.5 | 190.6 | 190.7 | 190.8 | 190.9 | 191.0 | 191.1 | 191.2 | 191.3 | 191.4 | 191.5 | 191.6 | 191.7 | 191.8 | 191.9 | 192.0 |
| 195     | 195.1 | 195.2 | 195.3 | 195.4                       | 195.5 | 195.6 | 195.7 | 195.8 | 195.9 | 196.0 | 196.1 | 196.2 | 196.3 | 196.4 | 196.5 | 196.6 | 196.7 | 196.8 | 196.9 | 197.0 |
| 200     | 200.1 | 200.2 | 200.3 | 200.4                       | 200.5 | 200.6 | 200.7 | 200.8 | 200.9 | 201.0 | 201.1 | 201.2 | 201.3 | 201.4 | 201.5 | 201.6 | 201.7 | 201.8 | 201.9 | 202.0 |
| 205     | 205.1 | 205.2 | 205.3 | 205.4                       | 205.5 | 205.6 | 205.7 | 205.8 | 205.9 | 206.0 | 206.1 | 206.2 | 206.3 | 206.4 | 206.5 | 206.6 | 206.7 | 206.8 | 206.9 | 207.0 |
| 210     | 210.1 | 210.2 | 210.3 | 210.4                       | 210.5 | 210.6 | 210.7 | 210.8 | 210.9 | 211.0 | 211.1 | 211.2 | 211.3 | 211.4 | 211.5 | 211.6 | 211.7 | 211.8 | 211.9 | 212.0 |
| 215     | 215.1 | 215.2 | 215.3 | 215.4                       | 215.5 | 215.6 | 215.7 | 215.8 | 215.9 | 216.0 | 216.1 | 216.2 | 216.3 | 216.4 | 216.5 | 216.6 | 216.7 | 216.8 | 216.9 | 217.0 |
| 220     | 220.1 | 220.2 | 220.3 | 220.4                       | 220.5 | 220.6 | 220.7 | 220.8 | 220.9 | 221.0 | 221.1 | 221.2 | 221.3 | 221.4 | 221.5 | 221.6 | 221.7 | 221.8 | 221.9 | 222.0 |
| 225     | 225.1 | 225.2 | 225.3 | 225.4                       | 225.5 | 225.6 | 225.7 | 225.8 | 225.9 | 226.0 | 226.1 | 226.2 | 226.3 | 226.4 | 226.5 | 226.6 | 226.7 | 226.8 | 226.9 | 227.0 |
| 230     | 230.1 | 230.2 | 230.3 | 230.4                       | 230.5 | 230.6 | 230.7 | 230.8 | 230.9 | 231.0 | 231.1 | 231.2 | 231.3 | 231.4 | 231.5 | 231.6 | 231.7 | 231.8 | 231.9 | 232.0 |
| 235     | 235.1 | 235.2 | 235.3 | 235.4                       | 235.5 | 235.6 | 235.7 | 235.8 | 235.9 | 236.0 | 236.1 | 236.2 | 236.3 | 236.4 | 236.5 | 236.6 | 236.7 | 236.8 | 236.9 | 237.0 |
| 240     | 240.1 | 240.2 | 240.3 | 240.4                       | 240.5 | 240.6 | 240.7 | 240.8 | 240.9 | 241.0 | 241.1 | 241.2 | 241.3 | 241.4 | 241.5 | 241.6 | 241.7 | 241.8 | 241.9 | 242.0 |
| 245     | 245.1 | 245.2 | 245.3 | 245.4                       | 245.5 | 245.6 | 245.7 | 245.8 | 245.9 | 246.0 | 246.1 | 246.2 | 246.3 | 246.4 | 246.5 | 246.6 | 246.7 | 246.8 | 246.9 | 247.0 |
| 250     | 250.1 | 250.2 | 250.3 | 250.4                       | 250.5 | 250.6 | 250.7 | 250.8 | 250.9 | 251.0 | 251.1 | 251.2 | 251.3 | 251.4 | 251.5 | 251.6 | 251.7 | 251.8 | 251.9 | 252.0 |
| 255     | 255.1 | 255.2 | 255.3 | 255.4                       | 255.5 | 255.6 | 255.7 | 255.8 | 255.9 | 256.0 | 256.1 | 256.2 | 256.3 | 256.4 | 256.5 | 256.6 | 256.7 | 256.8 | 256.9 | 257.0 |
| 260     | 260.1 | 260.2 | 260.3 | 260.4                       | 260.5 | 260.6 | 260.7 | 260.8 | 260.9 | 261.0 | 261.1 | 261.2 | 261.3 | 261.4 | 261.5 | 261.6 | 261.7 | 261.8 | 261.9 | 262.0 |
| 265     | 265.1 | 265.2 | 265.3 | 265.4                       | 265.5 | 265.6 | 265.7 | 265.8 | 265.9 | 266.0 | 266.1 | 266.2 | 266.3 | 266.4 | 266.5 | 266.6 | 266.7 | 266.8 | 266.9 | 267.0 |
| 270     | 270.1 | 270.2 | 270.3 | 270.4                       | 270.5 | 270.6 | 270.7 | 270.8 | 270.9 | 271.0 | 271.1 | 271.2 | 271.3 | 271.4 | 271.5 | 271.6 | 271.7 | 271.8 | 271.9 | 272.0 |
| 275     | 275.1 | 275.2 | 275.3 | 275.4                       | 275.5 | 275.6 | 275.7 | 275.8 | 275.9 | 276.0 | 276.1 | 276.2 | 276.3 | 276.4 | 276.5 | 276.6 | 276.7 | 276.8 | 276.9 | 277.0 |
| 280     | 280.1 | 280.2 | 280.3 | 280.4                       | 280.5 | 280.6 | 280.7 | 280.8 | 280.9 | 281.0 | 281.1 | 281.2 | 281.3 | 281.4 | 281.5 | 281.6 | 281.7 | 281.8 | 281.9 | 282.0 |
| 285     | 285.1 | 285.2 | 285.3 | 285.4                       | 285.5 | 285.6 | 285.7 | 285.8 | 285.9 | 286.0 | 286.1 | 286.2 | 286.3 | 286.4 | 286.5 | 286.6 | 286.7 | 286.8 | 286.9 | 287.0 |
| 290     | 290.1 | 290.2 | 290.3 | 290.4                       | 290.5 | 290.6 | 290.7 | 290.8 | 290.9 | 291.0 | 291.1 | 291.2 | 291.3 | 291.4 | 291.5 | 291.6 | 291.7 | 291.8 | 291.9 | 292.0 |
| 295     | 295.1 | 295.2 | 295.3 | 295.4                       | 295.5 | 295.6 | 295.7 | 295.8 | 295.9 | 296.0 | 296.1 | 296.2 | 296.3 | 296.4 | 296.5 | 296.6 | 296.7 | 296.8 | 296.9 | 297.0 |
| 300     | 300.1 | 300.2 | 300.3 | 300.4                       | 300.5 | 300.6 | 300.7 | 300.8 | 300.9 | 301.0 | 301.1 | 301.2 | 301.3 | 301.4 | 301.5 | 301.6 | 301.7 | 301.8 | 301.9 | 302.0 |
| 305     | 305.1 | 305.2 | 305.3 | 305.4                       | 305.5 | 305.6 | 305.7 | 305.8 | 305.9 | 306.0 | 306.1 | 306.2 | 306.3 | 306.4 | 306.5 | 306.6 | 306.7 | 306.8 | 306.9 | 307.0 |
| 310     | 310.1 | 310.2 | 310.3 | 310.4                       | 310.5 | 310.6 | 310.7 | 310.8 | 310.9 | 311.0 | 311.1 | 311.2 | 311.3 | 311.4 | 311.5 | 311.6 | 311.7 | 311.8 | 311.9 | 312.0 |
| 315     | 315.1 | 315.2 | 315.3 | 315.4                       | 315.5 | 315.6 | 315.7 | 315.8 | 315.9 | 316.0 | 316.1 | 316.2 | 316.3 | 316.4 | 316.5 | 316.6 | 316.7 | 316.8 | 316.9 | 317.0 |
| 320     | 320.1 | 320.2 | 320.3 | 320.4                       | 320.5 | 320.6 | 320.7 | 320.8 | 320.9 | 321.0 | 321.1 | 321.2 | 321.3 | 321.4 | 321.5 | 321.6 | 321.7 | 321.8 | 321.9 | 322.0 |
| 325     | 325.1 | 325.2 | 325.3 | 325.4                       | 325.5 | 325.6 | 325.7 | 325.8 | 325.9 | 326.0 | 326.1 | 326.2 | 326.3 | 326.4 | 326.5 | 326.6 | 326.7 | 326.8 | 326.9 | 327.0 |
| 330     | 330.1 | 330.2 | 330.3 | 330.4                       | 330.5 | 330.6 | 330.7 | 330.8 | 330.9 | 331.0 | 331.1 | 331.2 | 331.3 | 331.4 | 331.5 | 331.6 | 331.7 | 331.8 | 331.9 | 332.0 |
| 335     | 335.1 | 335.2 | 335.3 | 335.4                       | 335.5 | 335.6 | 335.7 | 335.8 | 335.9 | 336.0 | 336.1 | 336.2 | 336.3 | 336.4 | 336.5 | 336.6 | 336.7 | 336.8 | 336.9 | 337.0 |
| 340     | 340.1 | 340.2 | 340.3 | 340.4                       | 340.5 | 340.6 | 340.7 | 340.8 | 340.9 | 341.0 | 341.1 | 3     |       |       |       |       |       |       |       |       |

GLOBAL CLIMATOLOGY BRANCH  
USAFITAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275950 STATION NAME: KAZAN LSCR

PERIOD OF RECORD: 78-87  
MONTH: JUL YEAR(S): 2100-7100

| CEILING<br>IN<br>FEET | 1 | VISIBILITY IN STATUTE MILES |      |      |      |       |       | VISIBILITY IN STATUTE MILES |      |      |      |      |      |      |      |      |      |
|-----------------------|---|-----------------------------|------|------|------|-------|-------|-----------------------------|------|------|------|------|------|------|------|------|------|
|                       |   | GE                          | GE   | GE   | GE   | GE    | GE    | GE                          | GE   | GE   | GE   | GE   | GE   | GE   | GE   | GE   | GE   |
|                       |   | 10                          | 5    | 3    | 2    | 1 1/2 | 1 1/4 | 1                           | 3/4  | 5/8  | 1/2  | 5/16 | 1/4  | 0    |      |      |      |
| NO CTEL               | 1 | .7                          | 59.5 | 59.5 | 59.5 | 59.8  | 60.6  | 60.6                        | 60.6 | 60.6 | 60.6 | 60.6 | 60.6 | 60.6 | 60.6 | 60.6 | 60.6 |
| GE 20000              | 1 | .7                          | 63.7 | 63.7 | 63.7 | 64.1  | 65.4  | 65.4                        | 65.7 | 65.7 | 65.7 | 65.7 | 65.7 | 65.7 | 65.7 | 65.7 | 65.7 |
| GE 16000              | 1 | .7                          | 63.7 | 63.7 | 63.7 | 64.1  | 65.4  | 65.4                        | 65.7 | 65.7 | 65.7 | 65.7 | 65.7 | 65.7 | 65.7 | 65.7 | 65.7 |
| GE 14000              | 1 | .7                          | 63.7 | 63.7 | 63.7 | 64.1  | 65.4  | 65.4                        | 65.7 | 65.7 | 65.7 | 65.7 | 65.7 | 65.7 | 65.7 | 65.7 | 65.7 |
| GE 12000              | 1 | .7                          | 63.7 | 63.7 | 63.7 | 64.1  | 65.4  | 65.4                        | 65.7 | 65.7 | 65.7 | 65.7 | 65.7 | 65.7 | 65.7 | 65.7 | 65.7 |
| GE 10000              | 1 | .7                          | 79.1 | 79.1 | 79.1 | 80.4  | 82.0  | 82.0                        | 82.4 | 82.4 | 82.4 | 82.4 | 82.4 | 82.4 | 82.4 | 82.4 | 82.4 |
| GE 9000               | 1 | .7                          | 79.1 | 79.1 | 79.1 | 80.4  | 82.0  | 82.0                        | 82.4 | 82.4 | 82.4 | 82.4 | 82.4 | 82.4 | 82.4 | 82.4 | 82.4 |
| GE 8000               | 1 | .7                          | 79.1 | 79.1 | 79.1 | 80.4  | 82.0  | 82.0                        | 82.4 | 82.4 | 82.4 | 82.4 | 82.4 | 82.4 | 82.4 | 82.4 | 82.4 |
| GE 7000               | 1 | .7                          | 79.1 | 79.1 | 79.1 | 80.4  | 82.0  | 82.0                        | 82.4 | 82.4 | 82.4 | 82.4 | 82.4 | 82.4 | 82.4 | 82.4 | 82.4 |
| GE 6000               | 1 | .7                          | 79.1 | 79.1 | 79.1 | 80.4  | 82.0  | 82.0                        | 82.4 | 82.4 | 82.4 | 82.4 | 82.4 | 82.4 | 82.4 | 82.4 | 82.4 |
| GE 5000               | 1 | .7                          | 82.7 | 82.7 | 82.7 | 84.3  | 85.9  | 85.9                        | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 |
| GE 4500               | 1 | .7                          | 82.7 | 82.7 | 82.7 | 84.3  | 85.9  | 85.9                        | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 |
| GE 4000               | 1 | .7                          | 82.7 | 82.7 | 82.7 | 84.3  | 85.9  | 85.9                        | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 |
| GE 3500               | 1 | .7                          | 82.7 | 82.7 | 82.7 | 84.3  | 85.9  | 85.9                        | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 |
| GE 3000               | 1 | .7                          | 82.7 | 82.7 | 82.7 | 84.3  | 85.9  | 85.9                        | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 |
| GE 2500               | 1 | .7                          | 82.7 | 82.7 | 82.7 | 84.3  | 85.9  | 85.9                        | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 |
| GE 2000               | 1 | .7                          | 82.7 | 82.7 | 82.7 | 84.3  | 85.9  | 85.9                        | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 |
| GE 1800               | 1 | .7                          | 82.7 | 82.7 | 82.7 | 84.3  | 85.9  | 85.9                        | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 |
| GE 1600               | 1 | .7                          | 82.7 | 82.7 | 82.7 | 84.3  | 85.9  | 85.9                        | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 |
| GE 1400               | 1 | .7                          | 82.7 | 82.7 | 82.7 | 84.3  | 85.9  | 85.9                        | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 |
| GE 1200               | 1 | .7                          | 82.7 | 82.7 | 82.7 | 84.3  | 85.9  | 85.9                        | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 |
| GE 1000               | 1 | .7                          | 82.7 | 82.7 | 82.7 | 84.3  | 85.9  | 85.9                        | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 |
| GE 900                | 1 | .7                          | 82.7 | 82.7 | 82.7 | 84.3  | 85.9  | 85.9                        | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 |
| GE 800                | 1 | .7                          | 82.7 | 82.7 | 82.7 | 84.3  | 85.9  | 85.9                        | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 |
| GE 700                | 1 | .7                          | 82.7 | 82.7 | 82.7 | 84.3  | 85.9  | 85.9                        | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 |
| GE 600                | 1 | .7                          | 82.7 | 82.7 | 82.7 | 84.3  | 85.9  | 85.9                        | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 |
| GE 500                | 1 | .7                          | 82.7 | 82.7 | 82.7 | 84.3  | 85.9  | 85.9                        | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 |
| GE 400                | 1 | .7                          | 82.7 | 82.7 | 82.7 | 84.3  | 85.9  | 85.9                        | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 |
| GE 300                | 1 | .7                          | 82.7 | 82.7 | 82.7 | 84.3  | 85.9  | 85.9                        | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 |
| GE 200                | 1 | .7                          | 82.7 | 82.7 | 82.7 | 84.3  | 85.9  | 85.9                        | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 |
| GE 100                | 1 | .7                          | 82.7 | 82.7 | 82.7 | 84.3  | 85.9  | 85.9                        | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 |
| GE 0                  | 1 | .7                          | 82.7 | 82.7 | 82.7 | 84.3  | 85.9  | 85.9                        | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 | 86.3 |

TOTAL NUMBER OF OBSERVATIONS: 706

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/INAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM FOURLY OBSERVATIONS

STATION NUMBER: 27395 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: JUL FOURS(EST): ALL

| CEILING  |     | VISIBILITY IN STATUTE MILES |      |      |      |      |       |      |       |       |      |      |      |      |      |      |      |
|----------|-----|-----------------------------|------|------|------|------|-------|------|-------|-------|------|------|------|------|------|------|------|
| IN FEET  |     | 10                          | 6    | 5    | 4    | 3    | 2 1/2 | 2    | 1 1/2 | 1 1/4 | 1    | 3/4  | 5/8  | 1/2  | 5/16 | 1/4  | 0    |
| NO CEIL  | 1   | .7                          | 51.5 | 51.6 | 51.5 | 52.1 | 53.3  | 53.4 | 53.6  | 54.1  | 54.2 | 54.3 | 54.3 | 54.4 | 54.5 | 54.5 | 54.6 |
| GE 20000 | 1   | .7                          | 54.3 | 54.4 | 54.4 | 54.9 | 56.2  | 56.3 | 56.6  | 57.1  | 57.2 | 57.2 | 57.3 | 57.4 | 57.4 | 57.4 | 57.7 |
| GE 16000 | 1   | .7                          | 54.3 | 54.4 | 54.4 | 54.9 | 56.2  | 56.3 | 56.6  | 57.1  | 57.2 | 57.2 | 57.3 | 57.4 | 57.4 | 57.4 | 57.7 |
| GE 12000 | 1   | .7                          | 54.3 | 54.4 | 54.4 | 54.9 | 56.2  | 56.3 | 56.6  | 57.1  | 57.2 | 57.2 | 57.3 | 57.4 | 57.4 | 57.4 | 57.7 |
| GE 10000 | 1   | .7                          | 54.3 | 54.4 | 54.4 | 54.9 | 56.2  | 56.3 | 56.6  | 57.1  | 57.2 | 57.2 | 57.3 | 57.4 | 57.4 | 57.4 | 57.7 |
| GE 8000  | 1   | .7                          | 54.3 | 54.4 | 54.4 | 54.9 | 56.2  | 56.3 | 56.6  | 57.1  | 57.2 | 57.2 | 57.3 | 57.4 | 57.4 | 57.4 | 57.7 |
| GE 6000  | 1   | .7                          | 54.3 | 54.4 | 54.4 | 54.9 | 56.2  | 56.3 | 56.6  | 57.1  | 57.2 | 57.2 | 57.3 | 57.4 | 57.4 | 57.4 | 57.7 |
| GE 4000  | 1   | .7                          | 54.3 | 54.4 | 54.4 | 54.9 | 56.2  | 56.3 | 56.6  | 57.1  | 57.2 | 57.2 | 57.3 | 57.4 | 57.4 | 57.4 | 57.7 |
| GE 3000  | 1   | .7                          | 54.3 | 54.4 | 54.4 | 54.9 | 56.2  | 56.3 | 56.6  | 57.1  | 57.2 | 57.2 | 57.3 | 57.4 | 57.4 | 57.4 | 57.7 |
| GE 2000  | 1   | .7                          | 54.3 | 54.4 | 54.4 | 54.9 | 56.2  | 56.3 | 56.6  | 57.1  | 57.2 | 57.2 | 57.3 | 57.4 | 57.4 | 57.4 | 57.7 |
| GE 1000  | 1   | .7                          | 54.3 | 54.4 | 54.4 | 54.9 | 56.2  | 56.3 | 56.6  | 57.1  | 57.2 | 57.2 | 57.3 | 57.4 | 57.4 | 57.4 | 57.7 |
| GE 500   | 1   | .7                          | 54.3 | 54.4 | 54.4 | 54.9 | 56.2  | 56.3 | 56.6  | 57.1  | 57.2 | 57.2 | 57.3 | 57.4 | 57.4 | 57.4 | 57.7 |
| GE 200   | 1   | .7                          | 54.3 | 54.4 | 54.4 | 54.9 | 56.2  | 56.3 | 56.6  | 57.1  | 57.2 | 57.2 | 57.3 | 57.4 | 57.4 | 57.4 | 57.7 |
| GE 100   | 1   | .7                          | 54.3 | 54.4 | 54.4 | 54.9 | 56.2  | 56.3 | 56.6  | 57.1  | 57.2 | 57.2 | 57.3 | 57.4 | 57.4 | 57.4 | 57.7 |
| GE 50    | 1   | .7                          | 54.3 | 54.4 | 54.4 | 54.9 | 56.2  | 56.3 | 56.6  | 57.1  | 57.2 | 57.2 | 57.3 | 57.4 | 57.4 | 57.4 | 57.7 |
| GE 20    | 1   | .7                          | 54.3 | 54.4 | 54.4 | 54.9 | 56.2  | 56.3 | 56.6  | 57.1  | 57.2 | 57.2 | 57.3 | 57.4 | 57.4 | 57.4 | 57.7 |
| GE 10    | 1   | .7                          | 54.3 | 54.4 | 54.4 | 54.9 | 56.2  | 56.3 | 56.6  | 57.1  | 57.2 | 57.2 | 57.3 | 57.4 | 57.4 | 57.4 | 57.7 |
| GE 5     | 1   | .7                          | 54.3 | 54.4 | 54.4 | 54.9 | 56.2  | 56.3 | 56.6  | 57.1  | 57.2 | 57.2 | 57.3 | 57.4 | 57.4 | 57.4 | 57.7 |
| GE 2     | 1   | .7                          | 54.3 | 54.4 | 54.4 | 54.9 | 56.2  | 56.3 | 56.6  | 57.1  | 57.2 | 57.2 | 57.3 | 57.4 | 57.4 | 57.4 | 57.7 |
| GE 1     | 1   | .7                          | 54.3 | 54.4 | 54.4 | 54.9 | 56.2  | 56.3 | 56.6  | 57.1  | 57.2 | 57.2 | 57.3 | 57.4 | 57.4 | 57.4 | 57.7 |
| GE 0     | 1   | .7                          | 54.3 | 54.4 | 54.4 | 54.9 | 56.2  | 56.3 | 56.6  | 57.1  | 57.2 | 57.2 | 57.3 | 57.4 | 57.4 | 57.4 | 57.7 |
| GE 20000 | .8  | 64.5                        | 64.6 | 64.7 | 64.5 | 64.5 | 64.5  | 64.5 | 64.5  | 64.5  | 64.5 | 64.5 | 64.5 | 64.5 | 64.5 | 64.5 | 64.5 |
| GE 16000 | .8  | 64.5                        | 64.6 | 64.7 | 64.5 | 64.5 | 64.5  | 64.5 | 64.5  | 64.5  | 64.5 | 64.5 | 64.5 | 64.5 | 64.5 | 64.5 | 64.5 |
| GE 12000 | .8  | 64.5                        | 64.6 | 64.7 | 64.5 | 64.5 | 64.5  | 64.5 | 64.5  | 64.5  | 64.5 | 64.5 | 64.5 | 64.5 | 64.5 | 64.5 | 64.5 |
| GE 10000 | .8  | 64.5                        | 64.6 | 64.7 | 64.5 | 64.5 | 64.5  | 64.5 | 64.5  | 64.5  | 64.5 | 64.5 | 64.5 | 64.5 | 64.5 | 64.5 | 64.5 |
| GE 8000  | .8  | 64.5                        | 64.6 | 64.7 | 64.5 | 64.5 | 64.5  | 64.5 | 64.5  | 64.5  | 64.5 | 64.5 | 64.5 | 64.5 | 64.5 | 64.5 | 64.5 |
| GE 6000  | .8  | 64.5                        | 64.6 | 64.7 | 64.5 | 64.5 | 64.5  | 64.5 | 64.5  | 64.5  | 64.5 | 64.5 | 64.5 | 64.5 | 64.5 | 64.5 | 64.5 |
| GE 4000  | .8  | 64.5                        | 64.6 | 64.7 | 64.5 | 64.5 | 64.5  | 64.5 | 64.5  | 64.5  | 64.5 | 64.5 | 64.5 | 64.5 | 64.5 | 64.5 | 64.5 |
| GE 3000  | .8  | 64.5                        | 64.6 | 64.7 | 64.5 | 64.5 | 64.5  | 64.5 | 64.5  | 64.5  | 64.5 | 64.5 | 64.5 | 64.5 | 64.5 | 64.5 | 64.5 |
| GE 2000  | .8  | 64.5                        | 64.6 | 64.7 | 64.5 | 64.5 | 64.5  | 64.5 | 64.5  | 64.5  | 64.5 | 64.5 | 64.5 | 64.5 | 64.5 | 64.5 | 64.5 |
| GE 1000  | .8  | 64.5                        | 64.6 | 64.7 | 64.5 | 64.5 | 64.5  | 64.5 | 64.5  | 64.5  | 64.5 | 64.5 | 64.5 | 64.5 | 64.5 | 64.5 | 64.5 |
| GE 500   | .8  | 64.5                        | 64.6 | 64.7 | 64.5 | 64.5 | 64.5  | 64.5 | 64.5  | 64.5  | 64.5 | 64.5 | 64.5 | 64.5 | 64.5 | 64.5 | 64.5 |
| GE 200   | .8  | 64.5                        | 64.6 | 64.7 | 64.5 | 64.5 | 64.5  | 64.5 | 64.5  | 64.5  | 64.5 | 64.5 | 64.5 | 64.5 | 64.5 | 64.5 | 64.5 |
| GE 100   | .8  | 64.5                        | 64.6 | 64.7 | 64.5 | 64.5 | 64.5  | 64.5 | 64.5  | 64.5  | 64.5 | 64.5 | 64.5 | 64.5 | 64.5 | 64.5 | 64.5 |
| GE 50    | .8  | 64.5                        | 64.6 | 64.7 | 64.5 | 64.5 | 64.5  | 64.5 | 64.5  | 64.5  | 64.5 | 64.5 | 64.5 | 64.5 | 64.5 | 64.5 | 64.5 |
| GE 20    | .8  | 64.5                        | 64.6 | 64.7 | 64.5 | 64.5 | 64.5  | 64.5 | 64.5  | 64.5  | 64.5 | 64.5 | 64.5 | 64.5 | 64.5 | 64.5 | 64.5 |
| GE 10    | .8  | 64.5                        | 64.6 | 64.7 | 64.5 | 64.5 | 64.5  | 64.5 | 64.5  | 64.5  | 64.5 | 64.5 | 64.5 | 64.5 | 64.5 | 64.5 | 64.5 |
| GE 5     | .8  | 64.5                        | 64.6 | 64.7 | 64.5 | 64.5 | 64.5  | 64.5 | 64.5  | 64.5  | 64.5 | 64.5 | 64.5 | 64.5 | 64.5 | 64.5 | 64.5 |
| GE 2     | .8  | 64.5                        | 64.6 | 64.7 | 64.5 | 64.5 | 64.5  | 64.5 | 64.5  | 64.5  | 64.5 | 64.5 | 64.5 | 64.5 | 64.5 | 64.5 | 64.5 |
| GE 1     | .8  | 64.5                        | 64.6 | 64.7 | 64.5 | 64.5 | 64.5  | 64.5 | 64.5  | 64.5  | 64.5 | 64.5 | 64.5 | 64.5 | 64.5 | 64.5 | 64.5 |
| GE 0     | .8  | 64.5                        | 64.6 | 64.7 | 64.5 | 64.5 | 64.5  | 64.5 | 64.5  | 64.5  | 64.5 | 64.5 | 64.5 | 64.5 | 64.5 | 64.5 | 64.5 |
| GE 20000 | .9  | 73.5                        | 73.6 | 73.7 | 73.7 | 74.7 | 76.7  | 76.8 | 77.2  | 77.5  | 78.1 | 78.2 | 78.3 | 78.4 | 78.5 | 78.5 | 78.6 |
| GE 16000 | .9  | 73.5                        | 73.6 | 73.7 | 73.7 | 74.7 | 76.7  | 76.8 | 77.2  | 77.5  | 78.1 | 78.2 | 78.3 | 78.4 | 78.5 | 78.5 | 78.6 |
| GE 12000 | .9  | 73.5                        | 73.6 | 73.7 | 73.7 | 74.7 | 76.7  | 76.8 | 77.2  | 77.5  | 78.1 | 78.2 | 78.3 | 78.4 | 78.5 | 78.5 | 78.6 |
| GE 10000 | .9  | 73.5                        | 73.6 | 73.7 | 73.7 | 74.7 | 76.7  | 76.8 | 77.2  | 77.5  | 78.1 | 78.2 | 78.3 | 78.4 | 78.5 | 78.5 | 78.6 |
| GE 8000  | .9  | 73.5                        | 73.6 | 73.7 | 73.7 | 74.7 | 76.7  | 76.8 | 77.2  | 77.5  | 78.1 | 78.2 | 78.3 | 78.4 | 78.5 | 78.5 | 78.6 |
| GE 6000  | .9  | 73.5                        | 73.6 | 73.7 | 73.7 | 74.7 | 76.7  | 76.8 | 77.2  | 77.5  | 78.1 | 78.2 | 78.3 | 78.4 | 78.5 | 78.5 | 78.6 |
| GE 4000  | .9  | 73.5                        | 73.6 | 73.7 | 73.7 | 74.7 | 76.7  | 76.8 | 77.2  | 77.5  | 78.1 | 78.2 | 78.3 | 78.4 | 78.5 | 78.5 | 78.6 |
| GE 3000  | .9  | 73.5                        | 73.6 | 73.7 | 73.7 | 74.7 | 76.7  | 76.8 | 77.2  | 77.5  | 78.1 | 78.2 | 78.3 | 78.4 | 78.5 | 78.5 | 78.6 |
| GE 2000  | .9  | 73.5                        | 73.6 | 73.7 | 73.7 | 74.7 | 76.7  | 76.8 | 77.2  | 77.5  | 78.1 | 78.2 | 78.3 | 78.4 | 78.5 | 78.5 | 78.6 |
| GE 1000  | .9  | 73.5                        | 73.6 | 73.7 | 73.7 | 74.7 | 76.7  | 76.8 | 77.2  | 77.5  | 78.1 | 78.2 | 78.3 | 78.4 | 78.5 | 78.5 | 78.6 |
| GE 500   | .9  | 73.5                        | 73.6 | 73.7 | 73.7 | 74.7 | 76.7  | 76.8 | 77.2  | 77.5  | 78.1 | 78.2 | 78.3 | 78.4 | 78.5 | 78.5 | 78.6 |
| GE 200   | .9  | 73.5                        | 73.6 | 73.7 | 73.7 | 74.7 | 76.7  | 76.8 | 77.2  | 77.5  | 78.1 | 78.2 | 78.3 | 78.4 | 78.5 | 78.5 | 78.6 |
| GE 100   | .9  | 73.5                        | 73.6 | 73.7 | 73.7 | 74.7 | 76.7  | 76.8 | 77.2  | 77.5  | 78.1 | 78.2 | 78.3 | 78.4 | 78.5 | 78.5 | 78.6 |
| GE 50    | .9  | 73.5                        | 73.6 | 73.7 | 73.7 | 74.7 | 76.7  | 76.8 | 77.2  | 77.5  | 78.1 | 78.2 | 78.3 | 78.4 | 78.5 | 78.5 | 78.6 |
| GE 20    | .9  | 73.5                        | 73.6 | 73.7 | 73.7 | 74.7 | 76.7  | 76.8 | 77.2  | 77.5  | 78.1 | 78.2 | 78.3 | 78.4 | 78.5 | 78.5 | 78.6 |
| GE 10    | .9  | 73.5                        | 73.6 | 73.7 | 73.7 | 74.7 | 76.7  | 76.8 | 77.2  | 77.5  | 78.1 | 78.2 | 78.3 | 78.4 | 78.5 | 78.5 | 78.6 |
| GE 5     | .9  | 73.5                        | 73.6 | 73.7 | 73.7 | 74.7 | 76.7  | 76.8 | 77.2  | 77.5  | 78.1 | 78.2 | 78.3 | 78.4 | 78.5 | 78.5 | 78.6 |
| GE 2     | .9  | 73.5                        | 73.6 | 73.7 | 73.7 | 74.7 | 76.7  | 76.8 | 77.2  | 77.5  | 78.1 | 78.2 | 78.3 | 78.4 | 78.5 | 78.5 | 78.6 |
| GE 1     | .9  | 73.5                        | 73.6 | 73.7 | 73.7 | 74.7 | 76.7  | 76.8 | 77.2  | 77.5  | 78.1 | 78.2 | 78.3 | 78.4 | 78.5 | 78.5 | 78.6 |
| GE 0     | .9  | 73.5                        | 73.6 | 73.7 | 73.7 | 74.7 | 76.7  | 76.8 | 77.2  | 77.5  | 78.1 | 78.2 | 78.3 | 78.4 | 78.5 | 78.5 | 78.6 |
| GE 20000 | 1.0 | 82.4                        | 82.5 | 82.6 | 82.6 | 83.6 | 85.6  | 85.7 | 86.1  | 86.4  | 86.5 | 86.6 | 86.6 | 86.7 | 86.7 | 86.7 | 86.9 |
| GE 16000 | 1.0 | 82.4                        | 82.5 | 82.6 | 82.6 | 83.6 | 85.6  | 85.7 | 86.1  | 86.4  | 86.5 | 86.6 | 86.6 | 86.7 | 86.7 | 86.7 | 86.9 |
| GE 12000 | 1.0 | 82.4                        | 82.5 | 82.6 | 82.6 | 83.6 | 85.6  | 85.7 | 86.1  | 86.4  | 86.5 | 86.6 | 86.6 | 86.7 | 86.7 | 86.7 | 86.9 |
| GE 10000 | 1.0 | 82.4                        | 82.5 | 82.6 | 82.6 | 83.6 | 85.6  | 85.7 | 86.1  | 86.4  | 86.5 | 86.6 | 86.6 | 86.7 | 86.7 | 86.7 | 86.9 |
| GE 8000  | 1.0 | 82.4                        | 82.5 | 82.6 | 82.6 | 83.6 | 85.6  | 85.7 | 86.1  | 86.4  | 86.5 | 86.6 | 86.6 | 86.7 | 86.7 | 86.7 | 86.9 |
| GE 6000  | 1.0 | 82.4                        | 82.5 | 82.6 | 82.6 | 83.6 | 85.6  | 85.7 | 86.1  | 86.4  | 86.5 | 86.6 | 86.6 | 86.7 | 86.7 | 86.7 | 86.9 |
| GE 4000  | 1.0 | 82.4                        | 82.5 | 82.6 | 82.6 | 83.6 | 85.6  | 85.7 | 86.1  | 86.4  | 86.5 | 86.6 | 86.6 | 86.7 | 86.7 | 86.7 | 86.9 |
| GE 3000  | 1.0 | 82.4                        | 82.5 | 82.6 | 82.6 | 83.6 | 85.6  | 85.7 | 86.1  | 86.4  | 86.5 | 86.6 | 86.6 | 86.7 | 86.7 | 86.7 | 86.9 |
| GE 2000  | 1.0 | 82.4                        | 82.5 | 82.6 | 82.6 | 83.6 | 85.6  | 85.7 | 86.1  | 86.4  | 86.5 | 86.6 | 86.6 | 86.7 | 86.7 | 86.7 | 86.9 |
| GE 1000  | 1.0 | 82.4                        | 82.5 | 82.6 | 82.6 | 83.6 | 85.6  | 85.7 | 86.1  | 86.4  | 86.5 | 86.6 | 86.6 | 86.7 | 86.7 | 86.7 | 86.9 |
| GE 500   | 1.0 | 82.4                        | 82.5 | 82.6 | 82.6 | 83.6 | 85.6  | 85.7 | 86.1  | 86.4  | 86.5 | 86.6 | 86.6 | 86.7 | 86.7 | 86.7 | 86.9 |
| GE 200   | 1.0 | 82.4                        | 82.5 | 82.6 | 82.6 | 83.6 | 85.6  | 85.7 | 86.1  | 86.4  | 86.5 | 86.6 | 86.6 | 86.7 | 86.7 | 86.7 | 86.9 |
| GE 100   | 1.0 | 82.4                        | 82.5 | 82.6 | 82.6 | 83.6 | 85.6  | 85.7 | 86.1  | 86.4  | 86.5 | 86.6 | 86.6 | 86.7 | 86.7 | 86.7 | 86.9 |
| GE 50    | 1.0 | 82.4                        | 82.5 | 82.6 | 82.6 | 83.6 | 85.6  | 85.7 | 86.1  | 86.   |      |      |      |      |      |      |      |

TOTAL NUMBER OF OBSERVATIONS: 2418

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/PAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275951 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: AUG HOURS(UT): 0000-0200

| CEILING<br>IN<br>FEET | VISIBILITY IN STATUTE MILES |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-----------------------|-----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|                       | 1                           | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   |
| NO CEIL               |                             | 61.1 | 61.1 | 61.1 | 61.5 | 62.8 | 62.8 | 62.8 | 63.8 | 63.8 | 67.8 | 63.8 | 63.8 | 64.1 | 64.1 | 64.1 |
| GE 20000              |                             | 61.8 | 61.8 | 61.8 | 62.1 | 63.5 | 63.5 | 63.5 | 64.5 | 64.5 | 64.5 | 64.5 | 64.5 | 64.8 | 64.8 | 64.8 |
| GE 18000              |                             | 61.8 | 61.8 | 61.8 | 62.1 | 63.5 | 63.5 | 63.5 | 64.5 | 64.5 | 64.5 | 64.5 | 64.5 | 64.8 | 64.8 | 64.8 |
| GE 16000              |                             | 61.8 | 61.8 | 61.8 | 62.1 | 63.5 | 63.5 | 63.5 | 64.5 | 64.5 | 64.5 | 64.5 | 64.5 | 64.8 | 64.8 | 64.8 |
| GE 14000              |                             | 61.8 | 61.8 | 61.8 | 62.1 | 63.5 | 63.5 | 63.5 | 64.5 | 64.5 | 64.5 | 64.5 | 64.5 | 64.8 | 64.8 | 64.8 |
| GE 12000              |                             | 61.8 | 61.8 | 61.8 | 62.1 | 63.5 | 63.5 | 63.5 | 64.5 | 64.5 | 64.5 | 64.5 | 64.5 | 64.8 | 64.8 | 64.8 |
| GE 10000              |                             | 77.1 | 77.1 | 77.1 | 77.7 | 80.4 | 80.7 | 80.7 | 81.7 | 81.7 | 81.7 | 81.7 | 81.7 | 82.1 | 82.1 | 82.1 |
| GE 9000               |                             | 77.1 | 77.1 | 77.1 | 77.7 | 80.4 | 80.7 | 80.7 | 81.7 | 81.7 | 81.7 | 81.7 | 81.7 | 82.1 | 82.1 | 82.1 |
| GE 8000               |                             | 77.1 | 77.1 | 77.1 | 77.7 | 80.4 | 80.7 | 80.7 | 81.7 | 81.7 | 81.7 | 81.7 | 81.7 | 82.1 | 82.1 | 82.1 |
| GE 7000               |                             | 77.1 | 77.1 | 77.1 | 77.7 | 80.4 | 80.7 | 80.7 | 81.7 | 81.7 | 81.7 | 81.7 | 81.7 | 82.1 | 82.1 | 82.1 |
| GE 6000               |                             | 77.1 | 77.1 | 77.1 | 77.7 | 80.4 | 81.1 | 81.1 | 82.1 | 82.1 | 82.1 | 82.1 | 82.1 | 82.4 | 82.4 | 82.4 |
| GE 5000               |                             | 79.1 | 79.1 | 79.1 | 79.7 | 82.4 | 83.1 | 83.1 | 84.1 | 84.1 | 84.1 | 84.1 | 84.1 | 84.4 | 84.4 | 84.4 |
| GE 4500               |                             | 79.7 | 79.7 | 79.7 | 80.4 | 83.1 | 83.7 | 83.7 | 84.7 | 84.7 | 84.7 | 84.7 | 84.7 | 85.0 | 85.0 | 85.0 |
| GE 4000               |                             | 82.7 | 82.7 | 82.7 | 83.4 | 86.4 | 87.0 | 87.0 | 88.4 | 88.4 | 88.4 | 88.4 | 88.4 | 88.7 | 88.7 | 88.7 |
| GE 3500               |                             | 84.4 | 84.4 | 84.4 | 85.0 | 88.4 | 89.7 | 89.7 | 90.0 | 90.0 | 90.0 | 90.0 | 90.0 | 90.4 | 90.4 | 90.4 |
| GE 3000               | .7                          | 85.7 | 85.7 | 85.7 | 86.4 | 89.7 | 90.4 | 90.4 | 91.7 | 91.7 | 91.7 | 91.7 | 91.7 | 92.0 | 92.0 | 92.0 |
| GE 2500               | .3                          | 86.4 | 86.4 | 86.4 | 87.0 | 90.4 | 91.0 | 91.0 | 92.7 | 92.7 | 92.7 | 92.7 | 92.7 | 93.0 | 93.0 | 93.0 |
| GE 2000               | .3                          | 87.0 | 87.0 | 87.0 | 87.7 | 91.0 | 91.7 | 91.7 | 93.4 | 93.4 | 93.4 | 93.4 | 93.4 | 93.7 | 93.7 | 93.7 |
| GE 1800               | .3                          | 87.0 | 87.0 | 87.0 | 87.7 | 91.0 | 91.7 | 91.7 | 93.4 | 93.4 | 93.4 | 93.4 | 93.4 | 93.7 | 93.7 | 93.7 |
| GE 1600               | .3                          | 87.0 | 87.0 | 87.0 | 87.7 | 91.0 | 91.7 | 91.7 | 93.4 | 93.4 | 93.4 | 93.4 | 93.4 | 93.7 | 93.7 | 93.7 |
| GE 1400               | .3                          | 87.0 | 87.0 | 87.0 | 87.7 | 91.0 | 91.7 | 91.7 | 93.4 | 93.4 | 93.4 | 93.4 | 93.4 | 93.7 | 93.7 | 93.7 |
| GE 1200               | .3                          | 87.0 | 87.0 | 87.0 | 87.7 | 91.0 | 91.7 | 91.7 | 93.4 | 93.4 | 93.4 | 93.4 | 93.4 | 93.7 | 93.7 | 93.7 |
| GE 1000               | .3                          | 87.0 | 87.0 | 87.0 | 87.7 | 91.0 | 91.7 | 91.7 | 93.4 | 93.4 | 93.4 | 93.4 | 93.4 | 93.7 | 93.7 | 93.7 |
| GE 900                | .3                          | 87.0 | 87.0 | 87.0 | 87.7 | 91.0 | 91.7 | 91.7 | 93.4 | 93.4 | 93.4 | 93.4 | 93.4 | 93.7 | 93.7 | 93.7 |
| GE 800                | .3                          | 87.0 | 87.0 | 87.0 | 87.7 | 91.0 | 91.7 | 91.7 | 93.4 | 93.4 | 93.4 | 93.4 | 93.4 | 93.7 | 93.7 | 93.7 |
| GE 700                | .3                          | 87.0 | 87.0 | 87.0 | 87.7 | 91.0 | 91.7 | 91.7 | 93.4 | 93.4 | 93.4 | 93.4 | 93.4 | 93.7 | 93.7 | 93.7 |
| GE 600                | .3                          | 87.0 | 87.0 | 87.0 | 87.7 | 91.0 | 91.7 | 91.7 | 93.4 | 93.4 | 93.4 | 93.4 | 93.4 | 93.7 | 93.7 | 93.7 |
| GE 500                | .3                          | 87.0 | 87.0 | 87.0 | 87.7 | 91.0 | 91.7 | 91.7 | 93.4 | 93.4 | 93.4 | 93.4 | 93.4 | 93.7 | 93.7 | 93.7 |
| GE 400                | .3                          | 87.0 | 87.0 | 87.0 | 87.7 | 91.0 | 91.7 | 91.7 | 93.4 | 93.4 | 93.4 | 93.4 | 93.4 | 93.7 | 93.7 | 93.7 |
| GE 300                | .3                          | 87.0 | 87.0 | 87.0 | 87.7 | 91.0 | 91.7 | 91.7 | 93.4 | 93.4 | 93.4 | 93.4 | 93.4 | 93.7 | 93.7 | 93.7 |
| GE 200                | .3                          | 87.0 | 87.0 | 87.0 | 87.7 | 91.0 | 91.7 | 91.7 | 93.4 | 93.4 | 93.4 | 93.4 | 93.4 | 93.7 | 93.7 | 93.7 |
| GE 100                | .3                          | 87.0 | 87.0 | 87.0 | 87.7 | 91.0 | 91.7 | 91.7 | 93.4 | 93.4 | 93.4 | 93.4 | 93.4 | 93.7 | 93.7 | 93.7 |
| GE 0                  | .3                          | 87.0 | 87.0 | 87.0 | 87.7 | 91.0 | 91.7 | 91.7 | 93.4 | 93.4 | 93.4 | 93.4 | 93.4 | 93.7 | 93.7 | 93.7 |

TOTAL NUMBER OF OBSERVATIONS: 331

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 273950 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: AUG HOURS(UT): 0300-0500

| CEILING<br>IN<br>FEET | VISIBILITY IN STATUTE MILES |             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |
|-----------------------|-----------------------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|----------|----------|----------|----------|----------|----------|
|                       | GE<br>1                     | GE<br>1 1/2 | GE<br>2 | GE<br>3 | GE<br>4 | GE<br>5 | GE<br>6 | GE<br>7 | GE<br>8 | GE<br>9 | GE<br>10 | GE<br>11 | GE<br>12 | GE<br>13 | GE<br>14 | GE<br>15 |
| NO CEIL               |                             | 51.5        | 51.5    | 51.5    | 52.5    | 55.1    | 55.1    | 55.5    | 56.4    | 56.8    | 57.1     | 57.1     | 57.1     | 57.5     | 57.8     | 58.1     |
| GE 20000              |                             | 53.5        | 53.5    | 53.5    | 54.8    | 57.8    | 57.8    | 58.5    | 59.5    | 59.5    | 59.5     | 59.5     | 59.5     | 59.8     | 60.5     | 60.8     |
| GE 18000              |                             | 53.5        | 53.5    | 53.5    | 54.8    | 57.8    | 57.8    | 58.5    | 59.5    | 59.5    | 59.5     | 59.5     | 59.5     | 59.8     | 60.5     | 60.8     |
| GE 16000              |                             | 53.5        | 53.5    | 53.5    | 54.8    | 57.8    | 57.8    | 58.5    | 59.5    | 59.5    | 59.5     | 59.5     | 59.5     | 59.8     | 60.5     | 60.8     |
| GE 14000              |                             | 53.5        | 53.5    | 53.5    | 54.8    | 57.8    | 57.8    | 58.5    | 59.5    | 59.5    | 59.5     | 59.5     | 59.5     | 59.8     | 60.5     | 60.8     |
| GE 12000              |                             | 53.5        | 53.5    | 53.5    | 54.8    | 57.8    | 57.8    | 58.5    | 59.5    | 59.5    | 59.5     | 59.5     | 59.5     | 59.8     | 60.5     | 60.8     |
| GE 10000              |                             | 65.5        | 65.5    | 65.5    | 67.4    | 72.1    | 72.4    | 73.4    | 74.4    | 74.4    | 74.4     | 74.4     | 74.4     | 75.1     | 75.4     | 75.7     |
| GE 9000               |                             | 65.5        | 65.5    | 65.5    | 67.4    | 72.1    | 72.4    | 73.4    | 74.4    | 74.4    | 74.4     | 74.4     | 74.4     | 75.1     | 75.4     | 75.7     |
| GE 8000               |                             | 65.5        | 65.5    | 65.5    | 67.4    | 72.1    | 72.4    | 73.4    | 74.4    | 74.4    | 74.4     | 74.4     | 74.4     | 75.1     | 75.4     | 75.7     |
| GE 7000               |                             | 65.5        | 65.5    | 65.5    | 67.4    | 72.1    | 72.4    | 73.4    | 74.4    | 74.4    | 74.4     | 74.4     | 74.4     | 75.1     | 75.4     | 75.7     |
| GE 6000               |                             | 66.1        | 66.1    | 66.1    | 67.8    | 72.4    | 72.5    | 73.6    | 74.8    | 74.8    | 75.4     | 75.4     | 75.4     | 75.7     | 76.1     | 76.4     |
| GE 5000               |                             | 69.1        | 69.1    | 69.1    | 70.8    | 75.4    | 75.7    | 76.7    | 77.7    | 77.7    | 78.4     | 78.4     | 78.4     | 78.7     | 79.1     | 79.4     |
| GE 4500               |                             | 69.5        | 69.5    | 69.5    | 71.4    | 76.7    | 77.1    | 78.1    | 79.1    | 79.1    | 79.7     | 79.7     | 79.7     | 80.1     | 80.4     | 80.7     |
| GE 4000               |                             | 73.1        | 73.1    | 73.1    | 74.4    | 80.4    | 80.7    | 81.7    | 82.4    | 83.4    | 84.1     | 84.1     | 84.1     | 84.4     | 84.7     | 85.0     |
| GE 3500               |                             | 73.4        | 73.4    | 73.4    | 75.1    | 80.7    | 81.1    | 82.1    | 83.7    | 83.7    | 84.4     | 84.4     | 84.4     | 84.7     | 85.0     | 85.4     |
| GE 3000               |                             | 73.4        | 73.4    | 73.4    | 75.1    | 81.4    | 81.7    | 82.7    | 84.4    | 84.4    | 85.7     | 85.7     | 85.7     | 85.4     | 85.7     | 86.0     |
| GE 2500               |                             | 74.1        | 74.1    | 74.1    | 75.7    | 82.1    | 82.4    | 83.4    | 85.0    | 85.0    | 85.7     | 85.7     | 85.7     | 86.0     | 86.4     | 86.7     |
| GE 2000               |                             | 76.4        | 76.4    | 76.4    | 78.1    | 84.4    | 84.7    | 85.7    | 87.4    | 87.4    | 88.4     | 88.4     | 88.4     | 88.7     | 89.0     | 89.4     |
| GE 1800               |                             | 76.7        | 76.7    | 76.7    | 78.4    | 84.7    | 85.0    | 86.0    | 87.7    | 87.7    | 88.7     | 88.7     | 88.7     | 89.0     | 89.4     | 89.7     |
| GE 1600               |                             | 77.4        | 77.4    | 77.4    | 79.1    | 85.7    | 86.0    | 87.0    | 88.7    | 88.7    | 89.7     | 89.7     | 89.7     | 90.0     | 90.4     | 90.7     |
| GE 1400               |                             | 78.4        | 78.4    | 78.4    | 80.1    | 86.4    | 86.7    | 87.7    | 89.4    | 89.4    | 90.4     | 90.4     | 90.4     | 90.7     | 91.0     | 91.3     |
| GE 1200               |                             | 80.4        | 80.4    | 80.4    | 82.4    | 88.0    | 88.4    | 89.4    | 91.0    | 91.0    | 92.0     | 92.0     | 92.0     | 92.4     | 92.7     | 93.0     |
| GE 1000               |                             | 80.4        | 80.4    | 80.4    | 82.4    | 88.0    | 88.4    | 89.4    | 91.0    | 91.0    | 92.0     | 92.0     | 92.0     | 92.4     | 92.7     | 93.0     |
| GE 900                |                             | 80.4        | 80.4    | 80.4    | 82.4    | 88.0    | 88.4    | 89.4    | 91.0    | 91.0    | 92.0     | 92.0     | 92.0     | 92.4     | 92.7     | 93.0     |
| GE 800                |                             | 80.4        | 80.4    | 80.4    | 82.4    | 88.0    | 88.4    | 89.4    | 91.0    | 91.0    | 92.0     | 92.0     | 92.0     | 92.4     | 92.7     | 93.0     |
| GE 700                |                             | 81.1        | 81.1    | 81.1    | 83.1    | 89.4    | 89.7    | 90.7    | 92.4    | 92.4    | 93.4     | 93.4     | 93.4     | 93.7     | 94.0     | 94.3     |
| GE 600                |                             | 81.1        | 81.1    | 81.1    | 83.1    | 89.4    | 89.7    | 90.7    | 92.4    | 92.4    | 93.4     | 93.4     | 93.4     | 93.7     | 94.0     | 94.3     |
| GE 500                |                             | 81.1        | 81.1    | 81.1    | 83.1    | 89.4    | 89.7    | 90.7    | 92.4    | 92.4    | 93.4     | 93.4     | 93.4     | 93.7     | 94.0     | 94.3     |
| GE 400                |                             | 81.1        | 81.1    | 81.1    | 83.1    | 89.4    | 89.7    | 90.7    | 92.4    | 92.4    | 93.4     | 93.4     | 93.4     | 93.7     | 94.0     | 94.3     |
| GE 300                |                             | 81.1        | 81.1    | 81.1    | 83.1    | 89.4    | 89.7    | 90.7    | 92.4    | 92.4    | 93.4     | 93.4     | 93.4     | 93.7     | 94.0     | 94.3     |
| GE 200                |                             | 81.1        | 81.1    | 81.1    | 83.1    | 89.4    | 89.7    | 90.7    | 92.4    | 92.4    | 93.4     | 93.4     | 93.4     | 93.7     | 94.0     | 94.3     |
| GE 100                |                             | 81.1        | 81.1    | 81.1    | 83.1    | 89.4    | 89.7    | 90.7    | 92.4    | 92.4    | 93.4     | 93.4     | 93.4     | 93.7     | 94.0     | 94.3     |
| GE 0                  |                             | 81.1        | 81.1    | 81.1    | 83.1    | 89.4    | 89.7    | 90.7    | 92.4    | 92.4    | 93.4     | 93.4     | 93.4     | 93.7     | 94.0     | 94.3     |

TOTAL NUMBER OF OBSERVATIONS: 201

GLOBAL CLIMATOLOGY BRANCH  
USAF/CLAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM FOURLY OBSERVATIONS

STATION NUMBER: 275950 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: AUG HOURS(UT): 0600-0800

| CEILING<br>IN<br>FEET | VISIBILITY IN STATUTE MILES |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |
|-----------------------|-----------------------------|---------|---------|---------|---------|---------|---------|---------|---------|----------|----------|----------|----------|----------|----------|----------|
|                       | GE<br>1                     | GE<br>2 | GE<br>3 | GE<br>4 | GE<br>5 | GE<br>6 | GE<br>7 | GE<br>8 | GE<br>9 | GE<br>10 | GE<br>11 | GE<br>12 | GE<br>13 | GE<br>14 | GE<br>15 | GE<br>16 |
| NO CEIL               | 41.0                        | 41.0    | 41.0    | 41.7    | 48.0    | 48.0    | 48.3    | 50.7    | 50.7    | 51.0     | 51.0     | 51.0     | 51.3     | 51.3     | 52.7     |          |
| GE 2000               | 43.0                        | 43.0    | 43.0    | 43.7    | 50.0    | 50.0    | 50.3    | 52.7    | 52.7    | 53.0     | 53.0     | 53.0     | 53.3     | 53.3     | 54.7     |          |
| GE 1800               | 43.0                        | 43.0    | 43.0    | 43.7    | 50.0    | 50.0    | 50.3    | 52.7    | 52.7    | 53.0     | 53.0     | 53.0     | 53.3     | 53.3     | 54.7     |          |
| GE 1600               | 43.0                        | 43.0    | 43.0    | 43.7    | 50.0    | 50.0    | 50.3    | 52.7    | 52.7    | 53.0     | 53.0     | 53.0     | 53.3     | 53.3     | 54.7     |          |
| GE 1400               | 43.0                        | 43.0    | 43.0    | 43.7    | 50.0    | 50.0    | 50.3    | 52.7    | 52.7    | 53.0     | 53.0     | 53.0     | 53.3     | 53.3     | 54.7     |          |
| GE 1200               | 43.0                        | 43.0    | 43.0    | 43.7    | 50.0    | 50.0    | 50.3    | 52.7    | 52.7    | 53.0     | 53.0     | 53.0     | 53.3     | 53.3     | 54.7     |          |
| GE 1000               | 58.3                        | 58.3    | 58.3    | 59.0    | 67.3    | 67.3    | 68.3    | 71.3    | 71.3    | 71.7     | 71.7     | 71.7     | 72.3     | 72.3     | 73.7     |          |
| GE 900                | 58.3                        | 58.3    | 58.3    | 59.0    | 67.3    | 67.3    | 68.3    | 71.3    | 71.3    | 71.7     | 71.7     | 71.7     | 72.3     | 72.3     | 73.7     |          |
| GE 800                | 58.3                        | 58.3    | 58.3    | 59.0    | 67.3    | 67.3    | 68.3    | 71.3    | 71.3    | 71.7     | 71.7     | 71.7     | 72.3     | 72.3     | 73.7     |          |
| GE 700                | 58.3                        | 58.3    | 58.3    | 59.0    | 67.3    | 67.3    | 68.3    | 71.3    | 71.3    | 71.7     | 71.7     | 71.7     | 72.3     | 72.3     | 73.7     |          |
| GE 600                | 58.3                        | 58.3    | 58.3    | 59.0    | 67.3    | 67.3    | 68.3    | 71.3    | 71.3    | 71.7     | 71.7     | 71.7     | 72.3     | 72.3     | 73.7     |          |
| GE 500                | 60.7                        | 60.7    | 60.7    | 61.3    | 69.7    | 69.7    | 70.7    | 74.0    | 74.0    | 74.3     | 74.7     | 74.7     | 75.3     | 75.3     | 76.7     |          |
| GE 400                | 61.7                        | 61.7    | 61.7    | 62.3    | 70.7    | 70.7    | 71.7    | 75.0    | 75.0    | 75.3     | 75.7     | 75.7     | 76.3     | 76.3     | 77.7     |          |
| GE 300                | 65.7                        | 65.7    | 65.7    | 66.3    | 74.7    | 74.7    | 76.0    | 79.3    | 79.3    | 79.7     | 80.0     | 80.0     | 80.7     | 80.7     | 82.0     |          |
| GE 200                | 66.7                        | 66.7    | 66.7    | 67.3    | 75.0    | 75.0    | 76.3    | 79.7    | 79.7    | 80.0     | 80.3     | 80.3     | 81.0     | 81.0     | 82.3     |          |
| GE 100                | 66.7                        | 66.7    | 66.7    | 67.3    | 75.7    | 75.7    | 77.0    | 80.3    | 80.3    | 80.7     | 81.0     | 81.0     | 81.7     | 81.7     | 83.0     |          |
| GE 2500               | 69.3                        | 69.3    | 69.3    | 69.7    | 77.3    | 77.3    | 78.7    | 82.0    | 82.0    | 82.3     | 82.7     | 82.7     | 83.3     | 83.3     | 84.7     |          |
| GE 2000               | 70.3                        | 70.3    | 70.3    | 71.3    | 79.7    | 79.7    | 81.3    | 84.7    | 84.7    | 85.0     | 85.3     | 85.3     | 86.0     | 86.0     | 87.3     |          |
| GE 1800               | 70.7                        | 70.7    | 70.7    | 71.7    | 80.0    | 80.0    | 81.7    | 85.0    | 85.0    | 85.3     | 85.7     | 85.7     | 86.3     | 86.3     | 87.7     |          |
| GE 1600               | 71.0                        | 71.0    | 71.0    | 72.0    | 80.3    | 80.3    | 82.3    | 85.7    | 85.7    | 86.0     | 86.3     | 86.3     | 87.0     | 87.0     | 88.3     |          |
| GE 1400               | 73.0                        | 73.0    | 73.0    | 75.0    | 83.3    | 83.3    | 85.3    | 88.7    | 88.7    | 89.0     | 89.3     | 89.3     | 90.0     | 90.0     | 91.3     |          |
| GE 1200               | 75.0                        | 75.0    | 75.0    | 76.7    | 85.3    | 85.3    | 87.3    | 91.0    | 91.0    | 91.3     | 92.0     | 92.0     | 92.7     | 92.7     | 94.0     |          |
| GE 1000               | 75.0                        | 75.0    | 75.0    | 76.7    | 85.3    | 85.3    | 87.3    | 91.0    | 91.0    | 91.3     | 92.0     | 92.0     | 92.7     | 92.7     | 94.0     |          |
| GE 900                | 75.3                        | 75.3    | 75.3    | 77.0    | 85.7    | 85.7    | 87.7    | 91.3    | 91.3    | 91.7     | 92.3     | 92.3     | 93.0     | 93.0     | 94.7     |          |
| GE 800                | 75.7                        | 75.7    | 75.7    | 77.3    | 86.0    | 86.0    | 88.0    | 92.0    | 92.0    | 92.3     | 93.0     | 93.0     | 93.7     | 93.7     | 95.3     |          |
| GE 700                | 76.0                        | 76.0    | 76.0    | 78.0    | 86.7    | 86.7    | 88.7    | 93.3    | 93.3    | 93.7     | 94.2     | 94.2     | 94.7     | 94.7     | 96.7     |          |
| GE 600                | 76.3                        | 76.3    | 76.3    | 78.3    | 87.0    | 87.0    | 89.3    | 94.3    | 94.3    | 94.7     | 95.3     | 95.3     | 96.0     | 96.0     | 97.7     |          |
| GE 500                | 76.7                        | 76.7    | 76.7    | 79.7    | 87.7    | 87.7    | 90.3    | 95.7    | 95.7    | 96.0     | 96.7     | 96.7     | 97.3     | 97.3     | 99.0     |          |
| GE 400                | 76.7                        | 76.7    | 76.7    | 79.7    | 87.7    | 87.7    | 90.3    | 96.0    | 96.0    | 96.3     | 97.0     | 97.0     | 97.7     | 97.7     | 99.3     |          |
| GE 300                | 76.7                        | 76.7    | 76.7    | 79.7    | 87.7    | 87.7    | 90.3    | 96.0    | 96.0    | 96.3     | 97.0     | 97.0     | 97.7     | 97.7     | 99.3     |          |
| GE 200                | 76.7                        | 76.7    | 76.7    | 79.7    | 87.7    | 87.7    | 90.3    | 96.0    | 96.0    | 96.3     | 97.0     | 97.0     | 97.7     | 97.7     | 99.3     |          |
| GE 100                | 76.7                        | 76.7    | 76.7    | 79.7    | 87.7    | 87.7    | 90.3    | 96.0    | 96.0    | 96.3     | 97.0     | 97.0     | 97.7     | 97.7     | 99.3     |          |
| GE 0                  | 76.7                        | 76.7    | 76.7    | 79.7    | 87.7    | 87.7    | 90.3    | 96.0    | 96.0    | 96.3     | 97.0     | 97.0     | 97.7     | 97.7     | 99.3     |          |

TOTAL NUMBER OF OBSERVATIONS: 300

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

PERIOD OF RECORD: 78-87  
MONTH: AUG      FOURS (LAST): 0900-1100

[illegible]

TOTAL NUMBER OF OBSERVATIONS: 24

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

FILED OF RECORD: 78-87

MONTH: ALL      HOURS (LST): 1200-1400

| CEILING   |   |     | VISIBILITY IN STATUTE MILES |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |
|-----------|---|-----|-----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|
| IN FEET   | 1 | 1/2 | GE                          | GE   | GE   | GE   | GE   | GE   | GE   | GE   | GE   | GE   | GE   | GE   | GE   | GE   | GE   |  |
|           |   |     | 1                           | 1/2  | 1    | 1/2  | 1    | 1/2  | 1    | 1/2  | 1    | 1/2  | 1    | 1/2  | 1    | 1/2  | 1    |  |
| NO CEIL   | 1 | 1/2 | 43.6                        | 43.6 | 43.6 | 43.6 | 43.6 | 43.6 | 43.6 | 43.6 | 43.6 | 43.6 | 43.6 | 43.6 | 43.6 | 43.6 | 43.6 |  |
| GE 25000  | 1 | 1/2 | 45.3                        | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 |  |
| GE 40000  | 1 | 1/2 | 45.3                        | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 |  |
| GE 100000 | 1 | 1/2 | 45.3                        | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 |  |
| GE 140000 | 1 | 1/2 | 45.3                        | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 |  |
| GE 100000 | 1 | 1/2 | 45.3                        | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 | 45.3 |  |
| GE 170000 | 1 | 1/2 | 59.7                        | 59.7 | 59.7 | 59.7 | 59.7 | 59.7 | 59.7 | 59.7 | 59.7 | 59.7 | 59.7 | 59.7 | 59.7 | 59.7 | 59.7 |  |
| GE 97000  | 1 | 1/2 | 59.7                        | 59.7 | 59.7 | 59.7 | 59.7 | 59.7 | 59.7 | 59.7 | 59.7 | 59.7 | 59.7 | 59.7 | 59.7 | 59.7 | 59.7 |  |
| GE 87000  | 1 | 1/2 | 59.7                        | 59.7 | 59.7 | 59.7 | 59.7 | 59.7 | 59.7 | 59.7 | 59.7 | 59.7 | 59.7 | 59.7 | 59.7 | 59.7 | 59.7 |  |
| GE 77000  | 1 | 1/2 | 59.7                        | 59.7 | 59.7 | 59.7 | 59.7 | 59.7 | 59.7 | 59.7 | 59.7 | 59.7 | 59.7 | 59.7 | 59.7 | 59.7 | 59.7 |  |
| GE 67000  | 1 | 1/2 | 59.7                        | 59.7 | 59.7 | 59.7 | 59.7 | 59.7 | 59.7 | 59.7 | 59.7 | 59.7 | 59.7 | 59.7 | 59.7 | 59.7 | 59.7 |  |
| GE 57000  | 1 | 1/2 | 65.4                        | 65.4 | 65.4 | 65.4 | 65.4 | 65.4 | 65.4 | 65.4 | 65.4 | 65.4 | 65.4 | 65.4 | 65.4 | 65.4 | 65.4 |  |
| GE 47000  | 1 | 1/2 | 65.4                        | 65.4 | 65.4 | 65.4 | 65.4 | 65.4 | 65.4 | 65.4 | 65.4 | 65.4 | 65.4 | 65.4 | 65.4 | 65.4 | 65.4 |  |
| GE 37000  | 1 | 1/2 | 65.4                        | 65.4 | 65.4 | 65.4 | 65.4 | 65.4 | 65.4 | 65.4 | 65.4 | 65.4 | 65.4 | 65.4 | 65.4 | 65.4 | 65.4 |  |
| GE 27000  | 1 | 1/2 | 65.4                        | 65.4 | 65.4 | 65.4 | 65.4 | 65.4 | 65.4 | 65.4 | 65.4 | 65.4 | 65.4 | 65.4 | 65.4 | 65.4 | 65.4 |  |
| GE 17000  | 1 | 1/2 | 86.2                        | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 |  |
| GE 7000   | 1 | 1/2 | 86.2                        | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 |  |
| GE 10000  | 1 | 1/2 | 86.2                        | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 |  |
| GE 15000  | 1 | 1/2 | 86.2                        | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 |  |
| GE 10000  | 1 | 1/2 | 86.2                        | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 |  |
| GE 10000  | 1 | 1/2 | 86.2                        | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 |  |
| GE 10000  | 1 | 1/2 | 86.2                        | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 |  |
| GE 10000  | 1 | 1/2 | 86.2                        | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 |  |
| GE 10000  | 1 | 1/2 | 86.2                        | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 |  |
| GE 10000  | 1 | 1/2 | 86.2                        | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 |  |
| GE 10000  | 1 | 1/2 | 86.2                        | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 |  |
| GE 10000  | 1 | 1/2 | 86.2                        | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 |  |
| GE 10000  | 1 | 1/2 | 86.2                        | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 |  |
| GE 10000  | 1 | 1/2 | 86.2                        | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 |  |
| GE 10000  | 1 | 1/2 | 86.2                        | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 |  |
| GE 10000  | 1 | 1/2 | 86.2                        | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 |  |
| GE 10000  | 1 | 1/2 | 86.2                        | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 |  |
| GE 10000  | 1 | 1/2 | 86.2                        | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 |  |
| GE 10000  | 1 | 1/2 | 86.2                        | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 |  |
| GE 10000  | 1 | 1/2 | 86.2                        | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 |  |
| GE 10000  | 1 | 1/2 | 86.2                        | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 |  |
| GE 10000  | 1 | 1/2 | 86.2                        | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 |  |
| GE 10000  | 1 | 1/2 | 86.2                        | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 |  |
| GE 10000  | 1 | 1/2 | 86.2                        | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 |  |
| GE 10000  | 1 | 1/2 | 86.2                        | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 |  |
| GE 10000  | 1 | 1/2 | 86.2                        | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 |  |
| GE 10000  | 1 | 1/2 | 86.2                        | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 |  |
| GE 10000  | 1 | 1/2 | 86.2                        | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 |  |
| GE 10000  | 1 | 1/2 | 86.2                        | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 |  |
| GE 10000  | 1 | 1/2 | 86.2                        | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 |  |
| GE 10000  | 1 | 1/2 | 86.2                        | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 |  |
| GE 10000  | 1 | 1/2 | 86.2                        | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 |  |
| GE 10000  | 1 | 1/2 | 86.2                        | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 |  |
| GE 10000  | 1 | 1/2 | 86.2                        | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 | 86.2 |      |      |      |      |      |      |      |  |

TOTAL NUMBER OF OBSERVATIONS: 226

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 27595 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 75-87  
MONTH: AUG FOURS (LST): 1500-1700

| CEILING<br>IN<br>FEET | VISIBILITY IN STATUTE MILES |       |   |       |   |   |   |   |   |   |   |    |    |    |    |    |
|-----------------------|-----------------------------|-------|---|-------|---|---|---|---|---|---|---|----|----|----|----|----|
|                       | 1                           | 1 1/2 | 2 | 2 1/2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| NO CEIL               | 1                           | 1     | 1 | 1     | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  | 1  | 1  | 1  |
| GE 3000               | 1                           | 1     | 1 | 1     | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  | 1  | 1  | 1  |
| GE 1800               | 1                           | 1     | 1 | 1     | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  | 1  | 1  | 1  |
| GE 1600               | 1                           | 1     | 1 | 1     | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  | 1  | 1  | 1  |
| GE 1400               | 1                           | 1     | 1 | 1     | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  | 1  | 1  | 1  |
| GE 1200               | 1                           | 1     | 1 | 1     | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  | 1  | 1  | 1  |
| GE 1000               | 1                           | 1     | 1 | 1     | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  | 1  | 1  | 1  |
| GE 900                | 1                           | 1     | 1 | 1     | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  | 1  | 1  | 1  |
| GE 800                | 1                           | 1     | 1 | 1     | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  | 1  | 1  | 1  |
| GE 700                | 1                           | 1     | 1 | 1     | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  | 1  | 1  | 1  |
| GE 600                | 1                           | 1     | 1 | 1     | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  | 1  | 1  | 1  |
| GE 500                | 1                           | 1     | 1 | 1     | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  | 1  | 1  | 1  |
| GE 400                | 1                           | 1     | 1 | 1     | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  | 1  | 1  | 1  |
| GE 300                | 1                           | 1     | 1 | 1     | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  | 1  | 1  | 1  |
| GE 200                | 1                           | 1     | 1 | 1     | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  | 1  | 1  | 1  |
| GE 100                | 1                           | 1     | 1 | 1     | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  | 1  | 1  | 1  |
| GE 50                 | 1                           | 1     | 1 | 1     | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  | 1  | 1  | 1  |
| GE 0                  | 1                           | 1     | 1 | 1     | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  | 1  | 1  | 1  |
| GE 1000               | 1                           | 1     | 1 | 1     | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  | 1  | 1  | 1  |
| GE 900                | 1                           | 1     | 1 | 1     | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  | 1  | 1  | 1  |
| GE 800                | 1                           | 1     | 1 | 1     | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  | 1  | 1  | 1  |
| GE 700                | 1                           | 1     | 1 | 1     | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  | 1  | 1  | 1  |
| GE 600                | 1                           | 1     | 1 | 1     | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  | 1  | 1  | 1  |
| GE 500                | 1                           | 1     | 1 | 1     | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  | 1  | 1  | 1  |
| GE 400                | 1                           | 1     | 1 | 1     | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  | 1  | 1  | 1  |
| GE 300                | 1                           | 1     | 1 | 1     | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  | 1  | 1  | 1  |
| GE 200                | 1                           | 1     | 1 | 1     | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  | 1  | 1  | 1  |
| GE 100                | 1                           | 1     | 1 | 1     | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  | 1  | 1  | 1  |
| GE 50                 | 1                           | 1     | 1 | 1     | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  | 1  | 1  | 1  |
| GE 0                  | 1                           | 1     | 1 | 1     | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1  | 1  | 1  | 1  | 1  |

TOTAL NUMBER OF OBSERVATIONS: 296

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM FOURLY OBSERVATIONS

FILE NO OF RECORD: 78-57

NOTE: ALL HOURS (LST); 1800-2000

| SETTING                         | VISIBILITY IN STATUTE MILES |     |       |      |       |       |       |      |       |      |       |      |       |      |       |      |
|---------------------------------|-----------------------------|-----|-------|------|-------|-------|-------|------|-------|------|-------|------|-------|------|-------|------|
|                                 | 1/4                         | 1/2 | 3/4   | 1    | 1 1/4 | 1 1/2 | 1 3/4 | 2    | 2 1/2 | 3    | 3 1/2 | 4    | 4 1/2 | 5    | 5 1/2 | 6    |
|                                 | FEET                        | 1   | 1 1/2 | 2    | 2 1/2 | 3     | 3 1/2 | 4    | 4 1/2 | 5    | 5 1/2 | 6    | 6 1/2 | 7    | 7 1/2 | 8    |
| NO CELL                         |                             |     |       | 49.5 | 49.5  | 49.5  | 49.5  | 49.5 | 49.5  | 49.8 | 49.8  | 49.8 | 49.8  | 49.8 | 49.8  | 50.2 |
| GE 10000                        |                             |     |       | 52.4 | 52.4  | 53.4  | 53.4  | 53.4 | 53.4  | 54.1 | 54.1  | 54.1 | 54.1  | 54.1 | 54.1  | 54.4 |
| GE 15000                        |                             |     |       | 53.4 | 53.4  | 53.4  | 53.4  | 53.4 | 53.8  | 54.1 | 54.1  | 54.1 | 54.1  | 54.1 | 54.1  | 54.4 |
| GE 16000                        |                             |     |       | 53.4 | 53.4  | 53.4  | 53.4  | 53.4 | 53.8  | 54.1 | 54.1  | 54.1 | 54.1  | 54.1 | 54.1  | 54.4 |
| GE 14000                        |                             |     |       | 53.4 | 53.4  | 53.4  | 53.4  | 53.4 | 53.8  | 54.1 | 54.1  | 54.1 | 54.1  | 54.1 | 54.1  | 54.4 |
| GE 12000                        |                             |     |       | 53.4 | 53.4  | 53.4  | 53.4  | 53.4 | 53.8  | 54.1 | 54.1  | 54.1 | 54.1  | 54.1 | 54.1  | 54.4 |
| GE 10000                        |                             |     |       | 71.1 | 71.1  | 71.1  | 71.1  | 71.5 | 71.5  | 71.5 | 71.5  | 71.6 | 71.6  | 71.6 | 71.8  | 72.1 |
| GE 9000                         |                             |     |       | 71.1 | 71.1  | 71.1  | 71.1  | 71.5 | 71.5  | 71.5 | 71.5  | 71.6 | 71.6  | 71.6 | 71.8  | 72.1 |
| GE 8000                         |                             |     |       | 71.1 | 71.1  | 71.1  | 71.1  | 71.5 | 71.5  | 71.5 | 71.5  | 71.6 | 71.6  | 71.6 | 71.8  | 72.1 |
| GE 7000                         |                             |     |       | 71.1 | 71.1  | 71.1  | 71.1  | 71.5 | 71.5  | 71.5 | 71.5  | 71.6 | 71.6  | 71.6 | 71.8  | 72.1 |
| GE 6000                         |                             |     |       | 72.5 | 72.5  | 72.5  | 72.5  | 72.8 | 72.8  | 73.1 | 73.1  | 73.1 | 73.1  | 73.1 | 73.1  | 73.4 |
| GE 5000                         |                             |     |       | 77.4 | 77.4  | 77.4  | 77.4  | 77.4 | 77.4  | 77.7 | 77.7  | 77.7 | 77.7  | 77.7 | 77.7  | 78.0 |
| GE 4000                         |                             |     |       | 79.7 | 79.7  | 79.7  | 79.7  | 79.7 | 79.7  | 79.7 | 79.7  | 79.7 | 79.7  | 79.7 | 79.7  | 79.7 |
| GE 3000                         |                             |     |       | 89.2 | 89.2  | 89.2  | 89.2  | 89.2 | 89.2  | 89.2 | 89.2  | 89.2 | 89.2  | 89.2 | 89.2  | 89.5 |
| GE 2000                         |                             |     |       | 99.2 | 99.2  | 99.2  | 99.2  | 99.2 | 99.2  | 99.2 | 99.2  | 99.2 | 99.2  | 99.2 | 99.2  | 99.5 |
| GE 1000                         |                             |     |       | 99.2 | 99.2  | 99.2  | 99.2  | 99.2 | 99.2  | 99.2 | 99.2  | 99.2 | 99.2  | 99.2 | 99.2  | 99.5 |
| GE 5000                         |                             |     |       | 94.4 | 94.4  | 94.4  | 94.4  | 94.4 | 94.4  | 94.4 | 94.4  | 94.4 | 94.4  | 94.4 | 94.4  | 94.8 |
| GE 4000                         |                             |     |       | 94.4 | 94.4  | 94.4  | 94.4  | 94.4 | 94.4  | 94.4 | 94.4  | 94.4 | 94.4  | 94.4 | 94.4  | 94.8 |
| GE 3000                         |                             |     |       | 94.4 | 94.4  | 94.4  | 94.4  | 94.4 | 94.4  | 94.4 | 94.4  | 94.4 | 94.4  | 94.4 | 94.4  | 94.8 |
| GE 2000                         |                             |     |       | 94.4 | 94.4  | 94.4  | 94.4  | 94.4 | 94.4  | 94.4 | 94.4  | 94.4 | 94.4  | 94.4 | 94.4  | 94.8 |
| GE 1500                         |                             |     |       | 94.4 | 94.4  | 94.4  | 94.4  | 94.4 | 94.4  | 94.4 | 94.4  | 94.4 | 94.4  | 94.4 | 94.4  | 94.8 |
| GE 1000                         |                             |     |       | 94.4 | 94.4  | 94.4  | 94.4  | 94.4 | 94.4  | 94.4 | 94.4  | 94.4 | 94.4  | 94.4 | 94.4  | 94.8 |
| GE 1000                         |                             |     |       | 96.4 | 96.4  | 96.4  | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 |
| GE 900                          |                             |     |       | 96.4 | 96.4  | 96.4  | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 |
| GE 800                          |                             |     |       | 96.4 | 96.4  | 96.4  | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 |
| GE 700                          |                             |     |       | 96.4 | 96.4  | 96.4  | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 |
| GE 600                          |                             |     |       | 96.4 | 96.4  | 96.4  | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 |
| GE 500                          |                             |     |       | 96.4 | 96.4  | 96.4  | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 |
| GE 400                          |                             |     |       | 96.4 | 96.4  | 96.4  | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 |
| GE 300                          |                             |     |       | 96.4 | 96.4  | 96.4  | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 |
| GE 200                          |                             |     |       | 96.4 | 96.4  | 96.4  | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 |
| GE 100                          |                             |     |       | 96.4 | 96.4  | 96.4  | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 |
| GE 50                           |                             |     |       | 96.4 | 96.4  | 96.4  | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 |
| GE 25                           |                             |     |       | 96.4 | 96.4  | 96.4  | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 |
| GE 12.5                         |                             |     |       | 96.4 | 96.4  | 96.4  | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 |
| GE 6.25                         |                             |     |       | 96.4 | 96.4  | 96.4  | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 |
| GE 3.125                        |                             |     |       | 96.4 | 96.4  | 96.4  | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 |
| GE 1.5625                       |                             |     |       | 96.4 | 96.4  | 96.4  | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 |
| GE 0.78125                      |                             |     |       | 96.4 | 96.4  | 96.4  | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 |
| GE 0.390625                     |                             |     |       | 96.4 | 96.4  | 96.4  | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 |
| GE 0.1953125                    |                             |     |       | 96.4 | 96.4  | 96.4  | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 |
| GE 0.09765625                   |                             |     |       | 96.4 | 96.4  | 96.4  | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 |
| GE 0.048828125                  |                             |     |       | 96.4 | 96.4  | 96.4  | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 |
| GE 0.0244140625                 |                             |     |       | 96.4 | 96.4  | 96.4  | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 |
| GE 0.01220703125                |                             |     |       | 96.4 | 96.4  | 96.4  | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 |
| GE 0.006103515625               |                             |     |       | 96.4 | 96.4  | 96.4  | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 |
| GE 0.0030517578125              |                             |     |       | 96.4 | 96.4  | 96.4  | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 |
| GE 0.00152587890625             |                             |     |       | 96.4 | 96.4  | 96.4  | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 |
| GE 0.000762939453125            |                             |     |       | 96.4 | 96.4  | 96.4  | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 |
| GE 0.0003814697265625           |                             |     |       | 96.4 | 96.4  | 96.4  | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 |
| GE 0.00019073486328125          |                             |     |       | 96.4 | 96.4  | 96.4  | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 |
| GE 9.5E-05                      |                             |     |       | 96.4 | 96.4  | 96.4  | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 |
| GE 4.75E-05                     |                             |     |       | 96.4 | 96.4  | 96.4  | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 |
| GE 2.375E-05                    |                             |     |       | 96.4 | 96.4  | 96.4  | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 |
| GE 1.1875E-05                   |                             |     |       | 96.4 | 96.4  | 96.4  | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 |
| GE 5.9375E-06                   |                             |     |       | 96.4 | 96.4  | 96.4  | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 |
| GE 2.96875E-06                  |                             |     |       | 96.4 | 96.4  | 96.4  | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 |
| GE 1.484375E-06                 |                             |     |       | 96.4 | 96.4  | 96.4  | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 |
| GE 7.421875E-07                 |                             |     |       | 96.4 | 96.4  | 96.4  | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 |
| GE 3.7109375E-07                |                             |     |       | 96.4 | 96.4  | 96.4  | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 |
| GE 1.85546875E-07               |                             |     |       | 96.4 | 96.4  | 96.4  | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 |
| GE 9.27734375E-08               |                             |     |       | 96.4 | 96.4  | 96.4  | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 |
| GE 4.638671875E-08              |                             |     |       | 96.4 | 96.4  | 96.4  | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 |
| GE 2.3193359375E-08             |                             |     |       | 96.4 | 96.4  | 96.4  | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 |
| GE 1.15966796875E-08            |                             |     |       | 96.4 | 96.4  | 96.4  | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 |
| GE 5.79833984375E-09            |                             |     |       | 96.4 | 96.4  | 96.4  | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 |
| GE 2.899169921875E-09           |                             |     |       | 96.4 | 96.4  | 96.4  | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 |
| GE 1.4495849609375E-09          |                             |     |       | 96.4 | 96.4  | 96.4  | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 |
| GE 7.2479248046875E-10          |                             |     |       | 96.4 | 96.4  | 96.4  | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 |
| GE 3.62396240234375E-10         |                             |     |       | 96.4 | 96.4  | 96.4  | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 |
| GE 1.811981201171875E-10        |                             |     |       | 96.4 | 96.4  | 96.4  | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 |
| GE 9.059906005859375E-11        |                             |     |       | 96.4 | 96.4  | 96.4  | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 |
| GE 4.5299530029296875E-11       |                             |     |       | 96.4 | 96.4  | 96.4  | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 |
| GE 2.26497650146484375E-11      |                             |     |       | 96.4 | 96.4  | 96.4  | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 |
| GE 1.132488250732421875E-11     |                             |     |       | 96.4 | 96.4  | 96.4  | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 |
| GE 5.662441253662109375E-12     |                             |     |       | 96.4 | 96.4  | 96.4  | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 |
| GE 2.8312206268310546875E-12    |                             |     |       | 96.4 | 96.4  | 96.4  | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 |
| GE 1.41561031341552734375E-12   |                             |     |       | 96.4 | 96.4  | 96.4  | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 |
| GE 7.07805156707763671875E-13   |                             |     |       | 96.4 | 96.4  | 96.4  | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 |
| GE 3.539025783538818359375E-13  |                             |     |       | 96.4 | 96.4  | 96.4  | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 | 96.4  | 96.4 |
| GE 1.7695128917694091796875E-13 |                             |     |       | 96.4 | 96.4  | 96.4  |       |      |       |      |       |      |       |      |       |      |

TOTAL NUMBER OF OBSERVATIONS: 305

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM FOURLY OBSERVATIONS

PERIOD OF RECORD: 78-87  
MONTH: AUG HOURS(DAYS): 2100-2300

| CEILING    | VISIBILITY IN STATUTE MILES |     |     |     |     |     |     |   |       |       |       |    |       |       |    |    |    |
|------------|-----------------------------|-----|-----|-----|-----|-----|-----|---|-------|-------|-------|----|-------|-------|----|----|----|
|            | FEET                        | 1/8 | 1/4 | 3/8 | 1/2 | 5/8 | 3/4 | 1 | 1 1/4 | 1 1/2 | 1 3/4 | 2  | 2 1/4 | 2 1/2 | 3  | 4  | 5  |
|            | 1                           | 2   | 3   | 4   | 5   | 6   | 7   | 8 | 9     | 10    | 11    | 12 | 13    | 14    | 15 | 16 | 17 |
| NO CEILING | 1                           | 2   | 3   | 4   | 5   | 6   | 7   | 8 | 9     | 10    | 11    | 12 | 13    | 14    | 15 | 16 | 17 |
| CE 200 FT  | 1                           | 2   | 3   | 4   | 5   | 6   | 7   | 8 | 9     | 10    | 11    | 12 | 13    | 14    | 15 | 16 | 17 |
| CE 180 FT  | 1                           | 2   | 3   | 4   | 5   | 6   | 7   | 8 | 9     | 10    | 11    | 12 | 13    | 14    | 15 | 16 | 17 |
| CE 160 FT  | 1                           | 2   | 3   | 4   | 5   | 6   | 7   | 8 | 9     | 10    | 11    | 12 | 13    | 14    | 15 | 16 | 17 |
| CE 140 FT  | 1                           | 2   | 3   | 4   | 5   | 6   | 7   | 8 | 9     | 10    | 11    | 12 | 13    | 14    | 15 | 16 | 17 |
| CE 120 FT  | 1                           | 2   | 3   | 4   | 5   | 6   | 7   | 8 | 9     | 10    | 11    | 12 | 13    | 14    | 15 | 16 | 17 |
| CE 100 FT  | 1                           | 2   | 3   | 4   | 5   | 6   | 7   | 8 | 9     | 10    | 11    | 12 | 13    | 14    | 15 | 16 | 17 |
| CE 80 FT   | 1                           | 2   | 3   | 4   | 5   | 6   | 7   | 8 | 9     | 10    | 11    | 12 | 13    | 14    | 15 | 16 | 17 |
| CE 60 FT   | 1                           | 2   | 3   | 4   | 5   | 6   | 7   | 8 | 9     | 10    | 11    | 12 | 13    | 14    | 15 | 16 | 17 |
| CE 40 FT   | 1                           | 2   | 3   | 4   | 5   | 6   | 7   | 8 | 9     | 10    | 11    | 12 | 13    | 14    | 15 | 16 | 17 |
| CE 20 FT   | 1                           | 2   | 3   | 4   | 5   | 6   | 7   | 8 | 9     | 10    | 11    | 12 | 13    | 14    | 15 | 16 | 17 |
| CE 10 FT   | 1                           | 2   | 3   | 4   | 5   | 6   | 7   | 8 | 9     | 10    | 11    | 12 | 13    | 14    | 15 | 16 | 17 |
| CE 5 FT    | 1                           | 2   | 3   | 4   | 5   | 6   | 7   | 8 | 9     | 10    | 11    | 12 | 13    | 14    | 15 | 16 | 17 |
| CE 0 FT    | 1                           | 2   | 3   | 4   | 5   | 6   | 7   | 8 | 9     | 10    | 11    | 12 | 13    | 14    | 15 | 16 | 17 |

TOTAL NUMBER OF OBSERVATIONS: 72

GLOBAL CLIMATOLOGY BRANCH  
USAF/ETAC  
AIR WEATHER SERVICE/MC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 27490 STATION NAME: KAZAN, USSR

PERIOD OF RECORD: 78-87  
MONTHS: ALL HOURS(LEST): ALL

| CEILING<br>IN<br>FEET |   | VISIBILITY IN STATUTE MILES |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-----------------------|---|-----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|                       |   | GE                          | GF   | GF   | GF   | GF   | GF   | GF   | GF   | GF   | GF   | GF   | GF   | GF   | GF   | GF   | GF   |
|                       |   | 1                           | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   |
| NO CEIL               | 1 | 1.2                         | 49.1 | 49.1 | 49.1 | 49.4 | 50.8 | 50.8 | 51.0 | 51.6 | 51.6 | 51.7 | 51.7 | 51.7 | 51.8 | 51.8 | 52.1 |
| GE 2000               | 1 | 1.2                         | 51.2 | 51.4 | 51.4 | 51.7 | 53.2 | 53.2 | 53.4 | 54.0 | 54.0 | 54.1 | 54.1 | 54.1 | 54.2 | 54.3 | 54.5 |
| GE 1800               | 1 | 1.2                         | 51.2 | 51.4 | 51.4 | 51.7 | 53.2 | 53.2 | 53.4 | 54.0 | 54.0 | 54.1 | 54.1 | 54.1 | 54.2 | 54.3 | 54.5 |
| GE 1600               | 1 | 1.2                         | 51.2 | 51.4 | 51.4 | 51.7 | 53.2 | 53.2 | 53.4 | 54.0 | 54.0 | 54.1 | 54.1 | 54.1 | 54.2 | 54.3 | 54.5 |
| GE 1400               | 1 | 1.2                         | 51.2 | 51.4 | 51.4 | 51.7 | 53.2 | 53.2 | 53.4 | 54.0 | 54.0 | 54.1 | 54.1 | 54.1 | 54.2 | 54.3 | 54.5 |
| GE 1200               | 1 | 1.2                         | 51.2 | 51.4 | 51.4 | 51.7 | 53.2 | 53.2 | 53.4 | 54.0 | 54.0 | 54.1 | 54.1 | 54.1 | 54.2 | 54.3 | 54.5 |
| GE 1000               | 1 | 1.2                         | 67.4 | 67.5 | 67.5 | 68.1 | 70.4 | 70.5 | 70.8 | 71.5 | 71.5 | 71.6 | 71.6 | 71.6 | 71.8 | 71.8 | 72.1 |
| GE 900                | 1 | 1.2                         | 67.4 | 67.5 | 67.5 | 68.1 | 70.4 | 70.5 | 70.8 | 71.5 | 71.5 | 71.6 | 71.6 | 71.6 | 71.8 | 71.8 | 72.1 |
| GE 800                | 1 | 1.2                         | 67.4 | 67.5 | 67.5 | 68.1 | 70.4 | 70.5 | 70.8 | 71.5 | 71.5 | 71.6 | 71.6 | 71.6 | 71.8 | 71.8 | 72.1 |
| GE 700                | 1 | 1.2                         | 67.4 | 67.5 | 67.5 | 68.1 | 70.4 | 70.5 | 70.8 | 71.5 | 71.5 | 71.6 | 71.6 | 71.6 | 71.8 | 71.8 | 72.1 |
| GE 600                | 1 | 1.2                         | 67.4 | 67.5 | 67.5 | 68.1 | 70.4 | 70.5 | 70.8 | 71.5 | 71.5 | 71.6 | 71.6 | 71.6 | 71.8 | 71.8 | 72.1 |
| GE 500                | 1 | 1.2                         | 67.4 | 67.5 | 67.5 | 68.1 | 70.4 | 70.5 | 70.8 | 71.5 | 71.5 | 71.6 | 71.6 | 71.6 | 71.8 | 71.8 | 72.1 |
| GE 400                | 1 | 1.2                         | 71.7 | 71.8 | 71.8 | 72.4 | 74.7 | 74.9 | 75.3 | 76.0 | 76.0 | 76.1 | 76.2 | 76.2 | 76.3 | 76.4 | 76.7 |
| GE 300                | 1 | 1.2                         | 71.7 | 71.8 | 71.8 | 72.4 | 74.7 | 74.9 | 75.3 | 76.0 | 76.0 | 76.1 | 76.2 | 76.2 | 76.3 | 76.4 | 76.7 |
| GE 200                | 1 | 1.2                         | 71.7 | 71.8 | 71.8 | 72.4 | 74.7 | 74.9 | 75.3 | 76.0 | 76.0 | 76.1 | 76.2 | 76.2 | 76.3 | 76.4 | 76.7 |
| GE 100                | 1 | 1.2                         | 71.7 | 71.8 | 71.8 | 72.4 | 74.7 | 74.9 | 75.3 | 76.0 | 76.0 | 76.1 | 76.2 | 76.2 | 76.3 | 76.4 | 76.7 |
| GE 0                  | 1 | 1.2                         | 71.7 | 71.8 | 71.8 | 72.4 | 74.7 | 74.9 | 75.3 | 76.0 | 76.0 | 76.1 | 76.2 | 76.2 | 76.3 | 76.4 | 76.7 |
| GE 2000               | 2 | 1.2                         | 83.5 | 83.5 | 83.5 | 84.2 | 87.0 | 87.1 | 87.6 | 88.5 | 88.5 | 88.7 | 88.8 | 88.8 | 89.0 | 89.2 | 89.5 |
| GE 1800               | 2 | 1.2                         | 83.5 | 83.5 | 83.5 | 84.2 | 87.0 | 87.1 | 87.6 | 88.5 | 88.5 | 88.7 | 88.8 | 88.8 | 89.0 | 89.2 | 89.5 |
| GE 1600               | 2 | 1.2                         | 83.5 | 83.5 | 83.5 | 84.2 | 87.0 | 87.1 | 87.6 | 88.5 | 88.5 | 88.7 | 88.8 | 88.8 | 89.0 | 89.2 | 89.5 |
| GE 1400               | 2 | 1.2                         | 83.5 | 83.5 | 83.5 | 84.2 | 87.0 | 87.1 | 87.6 | 88.5 | 88.5 | 88.7 | 88.8 | 88.8 | 89.0 | 89.2 | 89.5 |
| GE 1200               | 2 | 1.2                         | 83.5 | 83.5 | 83.5 | 84.2 | 87.0 | 87.1 | 87.6 | 88.5 | 88.5 | 88.7 | 88.8 | 88.8 | 89.0 | 89.2 | 89.5 |
| GE 1000               | 2 | 1.2                         | 83.5 | 83.5 | 83.5 | 84.2 | 87.0 | 87.1 | 87.6 | 88.5 | 88.5 | 88.7 | 88.8 | 88.8 | 89.0 | 89.2 | 89.5 |
| GE 900                | 2 | 1.2                         | 83.5 | 83.5 | 83.5 | 84.2 | 87.0 | 87.1 | 87.6 | 88.5 | 88.5 | 88.7 | 88.8 | 88.8 | 89.0 | 89.2 | 89.5 |
| GE 800                | 2 | 1.2                         | 83.5 | 83.5 | 83.5 | 84.2 | 87.0 | 87.1 | 87.6 | 88.5 | 88.5 | 88.7 | 88.8 | 88.8 | 89.0 | 89.2 | 89.5 |
| GE 700                | 2 | 1.2                         | 83.5 | 83.5 | 83.5 | 84.2 | 87.0 | 87.1 | 87.6 | 88.5 | 88.5 | 88.7 | 88.8 | 88.8 | 89.0 | 89.2 | 89.5 |
| GE 600                | 2 | 1.2                         | 83.5 | 83.5 | 83.5 | 84.2 | 87.0 | 87.1 | 87.6 | 88.5 | 88.5 | 88.7 | 88.8 | 88.8 | 89.0 | 89.2 | 89.5 |
| GE 500                | 2 | 1.2                         | 83.5 | 83.5 | 83.5 | 84.2 | 87.0 | 87.1 | 87.6 | 88.5 | 88.5 | 88.7 | 88.8 | 88.8 | 89.0 | 89.2 | 89.5 |
| GE 400                | 2 | 1.2                         | 83.5 | 83.5 | 83.5 | 84.2 | 87.0 | 87.1 | 87.6 | 88.5 | 88.5 | 88.7 | 88.8 | 88.8 | 89.0 | 89.2 | 89.5 |
| GE 300                | 2 | 1.2                         | 83.5 | 83.5 | 83.5 | 84.2 | 87.0 | 87.1 | 87.6 | 88.5 | 88.5 | 88.7 | 88.8 | 88.8 | 89.0 | 89.2 | 89.5 |
| GE 200                | 2 | 1.2                         | 83.5 | 83.5 | 83.5 | 84.2 | 87.0 | 87.1 | 87.6 | 88.5 | 88.5 | 88.7 | 88.8 | 88.8 | 89.0 | 89.2 | 89.5 |
| GE 100                | 2 | 1.2                         | 83.5 | 83.5 | 83.5 | 84.2 | 87.0 | 87.1 | 87.6 | 88.5 | 88.5 | 88.7 | 88.8 | 88.8 | 89.0 | 89.2 | 89.5 |
| GE 0                  | 2 | 1.2                         | 83.5 | 83.5 | 83.5 | 84.2 | 87.0 | 87.1 | 87.6 | 88.5 | 88.5 | 88.7 | 88.8 | 88.8 | 89.0 | 89.2 | 89.5 |
| GE 2000               | 3 | 1.2                         | 91.1 | 91.1 | 91.1 | 91.2 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 |
| GE 1800               | 3 | 1.2                         | 91.1 | 91.1 | 91.1 | 91.2 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 |
| GE 1600               | 3 | 1.2                         | 91.1 | 91.1 | 91.1 | 91.2 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 |
| GE 1400               | 3 | 1.2                         | 91.1 | 91.1 | 91.1 | 91.2 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 |
| GE 1200               | 3 | 1.2                         | 91.1 | 91.1 | 91.1 | 91.2 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 |
| GE 1000               | 3 | 1.2                         | 91.1 | 91.1 | 91.1 | 91.2 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 |
| GE 900                | 3 | 1.2                         | 91.1 | 91.1 | 91.1 | 91.2 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 |
| GE 800                | 3 | 1.2                         | 91.1 | 91.1 | 91.1 | 91.2 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 |
| GE 700                | 3 | 1.2                         | 91.1 | 91.1 | 91.1 | 91.2 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 |
| GE 600                | 3 | 1.2                         | 91.1 | 91.1 | 91.1 | 91.2 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 |
| GE 500                | 3 | 1.2                         | 91.1 | 91.1 | 91.1 | 91.2 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 |
| GE 400                | 3 | 1.2                         | 91.1 | 91.1 | 91.1 | 91.2 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 |
| GE 300                | 3 | 1.2                         | 91.1 | 91.1 | 91.1 | 91.2 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 |
| GE 200                | 3 | 1.2                         | 91.1 | 91.1 | 91.1 | 91.2 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 |
| GE 100                | 3 | 1.2                         | 91.1 | 91.1 | 91.1 | 91.2 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 |
| GE 0                  | 3 | 1.2                         | 91.1 | 91.1 | 91.1 | 91.2 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 | 92.4 |

TOTAL NUMBER OF OBSERVATIONS: 2409

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275001 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: SEP HOURS: 0000-0200

| CEILING<br>IN<br>FEET | VISIBILITY IN STATUTE MILES |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-----------------------|-----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|                       | 1                           | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   |
| NO CEILING            | 47                          | 39.7 | 39.7 | 38.7 | 39.4 | 41.2 | 41.9 | 41.5 | 42.3 | 42.6 | 42.6 | 42.6 | 42.6 | 42.6 | 42.6 | 43.3 |
| GE 0000               | 47                          | 39.4 | 39.4 | 39.4 | 40.1 | 41.9 | 42.3 | 42.3 | 43.0 | 43.3 | 43.3 | 43.3 | 43.3 | 43.3 | 43.3 | 44.0 |
| GE 0100               | 47                          | 39.4 | 39.4 | 39.4 | 40.1 | 41.9 | 42.3 | 42.3 | 43.0 | 43.3 | 43.3 | 43.3 | 43.3 | 43.3 | 43.3 | 44.0 |
| GE 0200               | 47                          | 39.4 | 39.4 | 39.4 | 40.1 | 41.9 | 42.3 | 42.3 | 43.0 | 43.3 | 43.3 | 43.3 | 43.3 | 43.3 | 43.3 | 44.0 |
| GE 0300               | 47                          | 39.4 | 39.4 | 39.4 | 40.1 | 41.9 | 42.3 | 42.3 | 43.0 | 43.3 | 43.3 | 43.3 | 43.3 | 43.3 | 43.3 | 44.0 |
| GE 0400               | 47                          | 39.4 | 39.4 | 39.4 | 40.1 | 41.9 | 42.3 | 42.3 | 43.0 | 43.3 | 43.3 | 43.3 | 43.3 | 43.3 | 43.3 | 44.0 |
| GE 0500               | 47                          | 58.8 | 58.8 | 58.8 | 59.9 | 62.3 | 62.7 | 63.0 | 63.7 | 64.1 | 64.1 | 64.1 | 64.1 | 64.1 | 64.1 | 64.8 |
| GE 0600               | 47                          | 58.8 | 58.8 | 58.8 | 59.9 | 62.3 | 62.7 | 63.0 | 63.7 | 64.1 | 64.1 | 64.1 | 64.1 | 64.1 | 64.1 | 64.8 |
| GE 0700               | 47                          | 58.8 | 58.8 | 58.8 | 59.9 | 62.3 | 62.7 | 63.0 | 63.7 | 64.1 | 64.1 | 64.1 | 64.1 | 64.1 | 64.1 | 64.8 |
| GE 0800               | 47                          | 58.8 | 58.8 | 58.8 | 59.9 | 62.3 | 62.7 | 63.0 | 63.7 | 64.1 | 64.1 | 64.1 | 64.1 | 64.1 | 64.1 | 64.8 |
| GE 0900               | 47                          | 58.8 | 58.8 | 58.8 | 59.9 | 62.3 | 62.7 | 63.0 | 63.7 | 64.1 | 64.1 | 64.1 | 64.1 | 64.1 | 64.1 | 64.8 |
| GE 1000               | 47                          | 62.3 | 62.3 | 62.3 | 63.4 | 65.8 | 66.2 | 67.3 | 68.0 | 68.3 | 68.3 | 68.3 | 68.3 | 68.3 | 68.3 | 69.0 |
| GE 1100               | 47                          | 63.7 | 63.7 | 63.7 | 64.8 | 67.3 | 67.6 | 68.0 | 69.7 | 70.1 | 70.1 | 70.1 | 70.1 | 70.1 | 70.1 | 70.8 |
| GE 1200               | 47                          | 67.6 | 67.6 | 67.6 | 69.7 | 71.8 | 71.8 | 73.2 | 73.9 | 74.2 | 74.2 | 74.2 | 74.2 | 74.2 | 74.2 | 75.0 |
| GE 1300               | 47                          | 69.4 | 69.4 | 69.4 | 71.8 | 73.6 | 73.6 | 75.4 | 76.1 | 76.4 | 76.4 | 76.4 | 76.4 | 76.4 | 76.4 | 77.1 |
| GE 1400               | 47                          | 70.4 | 70.4 | 70.4 | 72.2 | 75.0 | 75.4 | 76.4 | 77.5 | 77.8 | 77.8 | 77.8 | 77.8 | 77.8 | 77.8 | 78.5 |
| GE 1500               | 47                          | 72.9 | 72.9 | 72.9 | 74.6 | 77.0 | 78.2 | 79.6 | 80.3 | 80.6 | 80.6 | 80.6 | 80.6 | 80.6 | 80.6 | 81.3 |
| GE 1600               | 47                          | 75.1 | 75.1 | 75.1 | 76.8 | 80.6 | 81.3 | 82.4 | 83.5 | 83.8 | 83.8 | 83.8 | 83.8 | 83.8 | 83.8 | 84.5 |
| GE 1700               | 47                          | 76.1 | 76.1 | 76.1 | 77.8 | 81.7 | 82.0 | 83.5 | 84.5 | 84.9 | 84.9 | 84.9 | 84.9 | 84.9 | 84.9 | 85.6 |
| GE 1800               | 47                          | 78.2 | 78.2 | 78.2 | 79.9 | 83.6 | 84.2 | 85.6 | 86.6 | 87.0 | 87.0 | 87.0 | 87.0 | 87.0 | 87.0 | 87.7 |
| GE 1900               | 47                          | 78.2 | 78.2 | 78.2 | 79.9 | 83.6 | 84.2 | 85.6 | 86.6 | 87.0 | 87.0 | 87.0 | 87.0 | 87.0 | 87.0 | 87.7 |
| GE 2000               | 47                          | 78.2 | 78.2 | 78.2 | 79.9 | 83.6 | 84.2 | 85.6 | 86.6 | 87.0 | 87.0 | 87.0 | 87.0 | 87.0 | 87.0 | 87.7 |
| GE 2100               | 47                          | 78.2 | 78.2 | 78.2 | 79.9 | 83.6 | 84.2 | 85.6 | 86.6 | 87.0 | 87.0 | 87.0 | 87.0 | 87.0 | 87.0 | 87.7 |
| GE 2200               | 47                          | 78.2 | 78.2 | 78.2 | 79.9 | 83.6 | 84.2 | 85.6 | 86.6 | 87.0 | 87.0 | 87.0 | 87.0 | 87.0 | 87.0 | 87.7 |
| GE 2300               | 47                          | 78.2 | 78.2 | 78.2 | 79.9 | 83.6 | 84.2 | 85.6 | 86.6 | 87.0 | 87.0 | 87.0 | 87.0 | 87.0 | 87.0 | 87.7 |
| GE 0000               | 47                          | 78.2 | 78.2 | 78.2 | 79.9 | 83.6 | 84.2 | 85.6 | 86.6 | 87.0 | 87.0 | 87.0 | 87.0 | 87.0 | 87.0 | 87.7 |
| GE 0100               | 47                          | 78.2 | 78.2 | 78.2 | 79.9 | 83.6 | 84.2 | 85.6 | 86.6 | 87.0 | 87.0 | 87.0 | 87.0 | 87.0 | 87.0 | 87.7 |
| GE 0200               | 47                          | 78.2 | 78.2 | 78.2 | 79.9 | 83.6 | 84.2 | 85.6 | 86.6 | 87.0 | 87.0 | 87.0 | 87.0 | 87.0 | 87.0 | 87.7 |
| GE 0300               | 47                          | 78.2 | 78.2 | 78.2 | 79.9 | 83.6 | 84.2 | 85.6 | 86.6 | 87.0 | 87.0 | 87.0 | 87.0 | 87.0 | 87.0 | 87.7 |
| GE 0400               | 47                          | 78.2 | 78.2 | 78.2 | 79.9 | 83.6 | 84.2 | 85.6 | 86.6 | 87.0 | 87.0 | 87.0 | 87.0 | 87.0 | 87.0 | 87.7 |
| GE 0500               | 47                          | 78.2 | 78.2 | 78.2 | 79.9 | 83.6 | 84.2 | 85.6 | 86.6 | 87.0 | 87.0 | 87.0 | 87.0 | 87.0 | 87.0 | 87.7 |
| GE 0600               | 47                          | 78.2 | 78.2 | 78.2 | 79.9 | 83.6 | 84.2 | 85.6 | 86.6 | 87.0 | 87.0 | 87.0 | 87.0 | 87.0 | 87.0 | 87.7 |
| GE 0700               | 47                          | 78.2 | 78.2 | 78.2 | 79.9 | 83.6 | 84.2 | 85.6 | 86.6 | 87.0 | 87.0 | 87.0 | 87.0 | 87.0 | 87.0 | 87.7 |
| GE 0800               | 47                          | 78.2 | 78.2 | 78.2 | 79.9 | 83.6 | 84.2 | 85.6 | 86.6 | 87.0 | 87.0 | 87.0 | 87.0 | 87.0 | 87.0 | 87.7 |
| GE 0900               | 47                          | 78.2 | 78.2 | 78.2 | 79.9 | 83.6 | 84.2 | 85.6 | 86.6 | 87.0 | 87.0 | 87.0 | 87.0 | 87.0 | 87.0 | 87.7 |
| GE 1000               | 47                          | 78.2 | 78.2 | 78.2 | 79.9 | 83.6 | 84.2 | 85.6 | 86.6 | 87.0 | 87.0 | 87.0 | 87.0 | 87.0 | 87.0 | 87.7 |
| GE 1100               | 47                          | 78.2 | 78.2 | 78.2 | 79.9 | 83.6 | 84.2 | 85.6 | 86.6 | 87.0 | 87.0 | 87.0 | 87.0 | 87.0 | 87.0 | 87.7 |
| GE 1200               | 47                          | 78.2 | 78.2 | 78.2 | 79.9 | 83.6 | 84.2 | 85.6 | 86.6 | 87.0 | 87.0 | 87.0 | 87.0 | 87.0 | 87.0 | 87.7 |
| GE 1300               | 47                          | 78.2 | 78.2 | 78.2 | 79.9 | 83.6 | 84.2 | 85.6 | 86.6 | 87.0 | 87.0 | 87.0 | 87.0 | 87.0 | 87.0 | 87.7 |
| GE 1400               | 47                          | 78.2 | 78.2 | 78.2 | 79.9 | 83.6 | 84.2 | 85.6 | 86.6 | 87.0 | 87.0 | 87.0 | 87.0 | 87.0 | 87.0 | 87.7 |
| GE 1500               | 47                          | 78.2 | 78.2 | 78.2 | 79.9 | 83.6 | 84.2 | 85.6 | 86.6 | 87.0 | 87.0 | 87.0 | 87.0 | 87.0 | 87.0 | 87.7 |
| GE 1600               | 47                          | 78.2 | 78.2 | 78.2 | 79.9 | 83.6 | 84.2 | 85.6 | 86.6 | 87.0 | 87.0 | 87.0 | 87.0 | 87.0 | 87.0 | 87.7 |
| GE 1700               | 47                          | 78.2 | 78.2 | 78.2 | 79.9 | 83.6 | 84.2 | 85.6 | 86.6 | 87.0 | 87.0 | 87.0 | 87.0 | 87.0 | 87.0 | 87.7 |
| GE 1800               | 47                          | 78.2 | 78.2 | 78.2 | 79.9 | 83.6 | 84.2 | 85.6 | 86.6 | 87.0 | 87.0 | 87.0 | 87.0 | 87.0 | 87.0 | 87.7 |
| GE 1900               | 47                          | 78.2 | 78.2 | 78.2 | 79.9 | 83.6 | 84.2 | 85.6 | 86.6 | 87.0 | 87.0 | 87.0 | 87.0 | 87.0 | 87.0 | 87.7 |
| GE 2000               | 47                          | 78.2 | 78.2 | 78.2 | 79.9 | 83.6 | 84.2 | 85.6 | 86.6 | 87.0 | 87.0 | 87.0 | 87.0 | 87.0 | 87.0 | 87.7 |
| GE 2100               | 47                          | 78.2 | 78.2 | 78.2 | 79.9 | 83.6 | 84.2 | 85.6 | 86.6 | 87.0 | 87.0 | 87.0 | 87.0 | 87.0 | 87.0 | 87.7 |
| GE 2200               | 47                          | 78.2 | 78.2 | 78.2 | 79.9 | 83.6 | 84.2 | 85.6 | 86.6 | 87.0 | 87.0 | 87.0 | 87.0 | 87.0 | 87.0 | 87.7 |
| GE 2300               | 47                          | 78.2 | 78.2 | 78.2 | 79.9 | 83.6 | 84.2 | 85.6 | 86.6 | 87.0 | 87.0 | 87.0 | 87.0 | 87.0 | 87.0 | 87.7 |

TOTAL NUMBER OF OBSERVATIONS: 234

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 27555 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 74-87  
MONTH: SEP HOURS(EST): 0300-0500

| CEILING<br>IN<br>FEET | 1 | GE | GE   | GE   | GE   | GE   | GE   | VISIBILITY IN STATUTE MILES |       |       |      |      |      |      |      |      |      |
|-----------------------|---|----|------|------|------|------|------|-----------------------------|-------|-------|------|------|------|------|------|------|------|
|                       |   |    |      |      |      |      |      | GE                          | GE    | GE    | GE   | GE   | GE   | GE   | GE   | GE   | GE   |
|                       |   | 10 | 15   | 20   | 25   | 30   | 35   | 2                           | 1 1/2 | 1 1/4 | 1    | 3/4  | 5/8  | 1/2  | 5/16 | 1/4  | 0    |
| NO CEIL               | 1 | 47 | 35.3 | 35.3 | 35.3 | 37.0 | 41.2 | 41.2                        | 41.2  | 41.5  | 41.9 | 42.2 | 42.2 | 42.6 | 43.3 | 43.6 | 43.9 |
| GE 20000              | 1 | 47 | 36.0 | 36.0 | 36.0 | 37.7 | 41.9 | 41.9                        | 41.9  | 42.2  | 42.6 | 42.6 | 42.9 | 43.3 | 43.9 | 44.3 | 44.6 |
| GE 15000              | 1 | 47 | 36.0 | 36.0 | 36.0 | 37.7 | 41.9 | 41.9                        | 41.9  | 42.2  | 42.6 | 42.6 | 42.9 | 43.3 | 43.9 | 44.3 | 44.6 |
| GE 10000              | 1 | 47 | 36.0 | 36.0 | 36.0 | 37.7 | 41.9 | 41.9                        | 41.9  | 42.2  | 42.6 | 42.6 | 42.9 | 43.3 | 43.9 | 44.3 | 44.6 |
| GE 7000               | 1 | 47 | 36.0 | 36.0 | 36.0 | 37.7 | 41.9 | 41.9                        | 41.9  | 42.2  | 42.6 | 42.6 | 42.9 | 43.3 | 43.9 | 44.3 | 44.6 |
| GE 4000               | 1 | 47 | 36.0 | 36.0 | 36.0 | 37.7 | 41.9 | 41.9                        | 41.9  | 42.2  | 42.6 | 42.6 | 42.9 | 43.3 | 43.9 | 44.3 | 44.6 |
| GE 3000               | 1 | 47 | 54.3 | 54.3 | 54.3 | 56.4 | 61.6 | 61.6                        | 61.9  | 62.6  | 63.0 | 63.3 | 63.7 | 64.4 | 64.7 | 65.1 | 65.4 |
| GE 2000               | 1 | 47 | 54.3 | 54.3 | 54.3 | 56.4 | 61.6 | 61.6                        | 61.9  | 62.6  | 63.0 | 63.3 | 63.7 | 64.4 | 64.7 | 65.1 | 65.4 |
| GE 1500               | 1 | 47 | 54.3 | 54.3 | 54.3 | 56.4 | 61.6 | 61.6                        | 61.9  | 62.6  | 63.0 | 63.3 | 63.7 | 64.4 | 64.7 | 65.1 | 65.4 |
| GE 1000               | 1 | 47 | 54.3 | 54.3 | 54.3 | 56.4 | 61.6 | 61.6                        | 61.9  | 62.6  | 63.0 | 63.3 | 63.7 | 64.4 | 64.7 | 65.1 | 65.4 |
| GE 800                | 1 | 47 | 55.7 | 55.7 | 55.7 | 57.8 | 63.3 | 63.3                        | 63.7  | 64.4  | 64.7 | 65.1 | 65.4 | 66.1 | 66.4 | 66.8 | 67.1 |
| GE 600                | 1 | 47 | 55.7 | 55.7 | 55.7 | 57.8 | 63.3 | 63.3                        | 63.7  | 64.4  | 64.7 | 65.1 | 65.4 | 66.1 | 66.4 | 66.8 | 67.1 |
| GE 400                | 1 | 47 | 57.8 | 57.8 | 57.8 | 60.2 | 65.7 | 65.7                        | 66.1  | 66.9  | 67.1 | 67.5 | 67.8 | 67.8 | 68.5 | 68.9 | 69.2 |
| GE 300                | 1 | 47 | 57.8 | 57.8 | 57.8 | 60.2 | 65.7 | 65.7                        | 66.1  | 66.9  | 67.1 | 67.5 | 67.8 | 67.8 | 68.5 | 68.9 | 69.2 |
| GE 200                | 1 | 47 | 57.8 | 57.8 | 57.8 | 60.2 | 65.7 | 65.7                        | 66.1  | 66.9  | 67.1 | 67.5 | 67.8 | 67.8 | 68.5 | 68.9 | 69.2 |
| GE 150                | 1 | 47 | 61.6 | 61.6 | 61.6 | 64.4 | 70.2 | 70.2                        | 71.3  | 72.0  | 72.3 | 72.7 | 72.7 | 73.7 | 75.7 | 74.0 | 74.4 |
| GE 100                | 1 | 47 | 63.3 | 63.3 | 63.3 | 66.1 | 72.3 | 72.3                        | 73.4  | 74.0  | 74.4 | 74.7 | 74.7 | 75.1 | 75.8 | 76.1 | 76.5 |
| GE 75                 | 1 | 47 | 66.4 | 66.4 | 66.4 | 69.2 | 75.8 | 75.8                        | 76.8  | 77.5  | 77.9 | 78.2 | 78.2 | 78.5 | 79.2 | 79.6 | 79.9 |
| GE 50                 | 1 | 47 | 67.1 | 67.1 | 67.1 | 69.9 | 76.5 | 76.5                        | 77.5  | 78.2  | 78.5 | 78.9 | 79.2 | 79.2 | 79.9 | 80.3 | 80.6 |
| GE 25                 | 1 | 47 | 68.9 | 68.9 | 68.9 | 71.6 | 79.2 | 79.2                        | 79.6  | 80.6  | 81.3 | 81.3 | 81.3 | 81.3 | 82.0 | 82.4 | 82.7 |
| GE 15                 | 1 | 47 | 71.3 | 71.3 | 71.3 | 74.0 | 80.6 | 80.6                        | 80.6  | 83.0  | 83.4 | 83.7 | 83.7 | 84.1 | 84.8 | 85.1 | 85.5 |
| GE 10                 | 1 | 47 | 73.7 | 73.7 | 73.7 | 76.5 | 83.4 | 83.4                        | 85.1  | 85.8  | 86.2 | 86.5 | 86.5 | 86.9 | 87.5 | 87.9 | 88.2 |
| GE 7.5                | 1 | 47 | 74.4 | 74.4 | 74.4 | 77.2 | 84.1 | 84.1                        | 85.8  | 86.5  | 87.2 | 87.5 | 87.5 | 87.9 | 88.6 | 89.0 | 89.3 |
| GE 5                  | 1 | 47 | 74.7 | 74.7 | 74.7 | 77.5 | 84.4 | 84.4                        | 86.2  | 87.2  | 87.9 | 88.2 | 88.2 | 88.5 | 89.3 | 89.6 | 90.0 |
| GE 2.5                | 1 | 47 | 75.4 | 75.4 | 75.4 | 78.2 | 85.1 | 85.1                        | 86.9  | 87.9  | 88.6 | 88.9 | 89.3 | 89.3 | 90.0 | 90.3 | 90.7 |
| GE 1.5                | 1 | 47 | 76.1 | 76.1 | 76.1 | 79.6 | 87.5 | 87.5                        | 89.3  | 90.7  | 91.7 | 92.4 | 92.4 | 92.7 | 93.4 | 93.8 | 94.1 |
| GE 1                  | 1 | 47 | 76.5 | 76.5 | 76.5 | 80.3 | 88.6 | 88.6                        | 90.3  | 91.7  | 92.7 | 93.4 | 93.4 | 93.8 | 94.5 | 94.8 | 95.2 |
| GE .75                | 1 | 47 | 76.5 | 76.5 | 76.5 | 80.3 | 88.6 | 88.6                        | 90.3  | 91.7  | 92.7 | 93.4 | 93.4 | 93.8 | 94.5 | 94.8 | 95.2 |
| GE .5                 | 1 | 47 | 76.5 | 76.5 | 76.5 | 80.3 | 88.6 | 88.6                        | 90.3  | 91.7  | 92.7 | 93.4 | 93.4 | 93.8 | 94.5 | 94.8 | 95.2 |
| GE .25                | 1 | 47 | 76.5 | 76.5 | 76.5 | 80.3 | 88.6 | 88.6                        | 90.3  | 91.7  | 92.7 | 93.4 | 93.4 | 93.8 | 94.5 | 94.8 | 95.2 |
| GE .15                | 1 | 47 | 76.5 | 76.5 | 76.5 | 80.3 | 88.6 | 88.6                        | 90.3  | 91.7  | 92.7 | 93.4 | 93.4 | 93.8 | 94.5 | 94.8 | 95.2 |
| GE .1                 | 1 | 47 | 76.5 | 76.5 | 76.5 | 80.3 | 88.6 | 88.6                        | 90.3  | 91.7  | 92.7 | 93.4 | 93.4 | 93.8 | 94.5 | 94.8 | 95.2 |
| GE .05                | 1 | 47 | 76.5 | 76.5 | 76.5 | 80.3 | 88.6 | 88.6                        | 90.3  | 91.7  | 92.7 | 93.4 | 93.4 | 93.8 | 94.5 | 94.8 | 95.2 |
| GE .01                | 1 | 47 | 76.5 | 76.5 | 76.5 | 80.3 | 88.6 | 88.6                        | 90.3  | 91.7  | 92.7 | 93.4 | 93.4 | 93.8 | 94.5 | 94.8 | 95.2 |

TOTAL NUMBER OF OBSERVATIONS: 259

WORLDWIDE CLIMATOLOGY BRANCH  
USAF/CLTAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275957 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: SEP HOURS(UT): 0600-0800

| CEILING  |      | VISIBILITY IN STATUTE MILES |      |      |      |      |      |      |      |      |       |       |       |       |       |       |       |       |       |
|----------|------|-----------------------------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| IN       | FEET | GE 1                        | GE 2 | GE 3 | GE 4 | GE 5 | GE 6 | GE 7 | GE 8 | GE 9 | GE 10 | GE 11 | GE 12 | GE 13 | GE 14 | GE 15 | GE 16 | GE 17 | GE 18 |
| NO CEIL  | 1    | .3                          | 22.0 | 22.0 | 22.0 | 27.3 | 26.0 | 26.0 | 27.4 | 28.5 | 28.5  | 29.5  | 29.5  | 30.2  | 30.2  | 30.9  | 30.9  | 31.9  |       |
| GE 200   | 1    | .3                          | 24.0 | 24.0 | 24.0 | 24.7 | 27.4 | 27.4 | 28.8 | 29.9 | 29.9  | 30.9  | 30.9  | 31.6  | 31.6  | 32.3  | 32.3  | 33.3  |       |
| GE 400   | 1    | .3                          | 24.0 | 24.0 | 24.0 | 24.7 | 27.4 | 27.4 | 28.8 | 29.9 | 29.9  | 30.9  | 30.9  | 31.6  | 31.6  | 32.3  | 32.3  | 33.3  |       |
| GE 600   | 1    | .3                          | 24.0 | 24.0 | 24.0 | 24.7 | 27.4 | 27.4 | 28.8 | 29.9 | 29.9  | 30.9  | 30.9  | 31.6  | 31.6  | 32.3  | 32.3  | 33.3  |       |
| GE 800   | 1    | .3                          | 24.0 | 24.0 | 24.0 | 24.7 | 27.4 | 27.4 | 28.8 | 29.9 | 29.9  | 30.9  | 30.9  | 31.6  | 31.6  | 32.3  | 32.3  | 33.3  |       |
| GE 1000  | 1    | .3                          | 24.0 | 24.0 | 24.0 | 24.7 | 27.4 | 27.4 | 28.8 | 29.9 | 29.9  | 30.9  | 30.9  | 31.6  | 31.6  | 32.3  | 32.3  | 33.3  |       |
| GE 1200  | 1    | .3                          | 24.0 | 24.0 | 24.0 | 24.7 | 27.4 | 27.4 | 28.8 | 29.9 | 29.9  | 30.9  | 30.9  | 31.6  | 31.6  | 32.3  | 32.3  | 33.3  |       |
| GE 1400  | 1    | .3                          | 41.3 | 41.7 | 41.7 | 43.1 | 50.3 | 50.3 | 52.8 | 55.2 | 55.6  | 57.3  | 57.3  | 58.0  | 58.0  | 58.7  | 58.7  | 60.1  |       |
| GE 1600  | 1    | .3                          | 41.3 | 41.7 | 41.7 | 43.1 | 50.3 | 50.3 | 52.8 | 55.2 | 55.6  | 57.3  | 57.3  | 58.0  | 58.0  | 58.7  | 58.7  | 60.1  |       |
| GE 1800  | 1    | .3                          | 41.3 | 41.7 | 41.7 | 43.1 | 50.3 | 50.3 | 52.8 | 55.2 | 55.6  | 57.3  | 57.3  | 58.0  | 58.0  | 58.7  | 58.7  | 60.1  |       |
| GE 2000  | 1    | .3                          | 41.3 | 41.7 | 41.7 | 43.1 | 50.3 | 50.3 | 52.8 | 55.2 | 55.6  | 57.3  | 57.3  | 58.0  | 58.0  | 58.7  | 58.7  | 60.1  |       |
| GE 2200  | 1    | .3                          | 41.3 | 41.7 | 41.7 | 43.1 | 50.3 | 50.3 | 52.8 | 55.2 | 55.6  | 57.3  | 57.3  | 58.0  | 58.0  | 58.7  | 58.7  | 60.1  |       |
| GE 2400  | 1    | .3                          | 43.6 | 44.1 | 44.1 | 45.6 | 53.1 | 53.1 | 55.6 | 58.0 | 58.3  | 60.1  | 60.1  | 60.8  | 60.8  | 61.5  | 61.5  | 62.8  |       |
| GE 2600  | 1    | .3                          | 43.6 | 44.1 | 44.1 | 45.6 | 53.1 | 53.1 | 55.6 | 58.0 | 58.3  | 60.1  | 60.1  | 60.8  | 60.8  | 61.5  | 61.5  | 62.8  |       |
| GE 2800  | 1    | .3                          | 47.6 | 47.6 | 47.6 | 47.9 | 57.3 | 57.3 | 59.7 | 62.2 | 62.5  | 64.2  | 64.2  | 64.9  | 64.9  | 65.6  | 65.6  | 67.0  |       |
| GE 3000  | 1    | .3                          | 47.6 | 47.6 | 47.6 | 47.9 | 57.3 | 57.3 | 59.7 | 62.2 | 62.5  | 64.2  | 64.2  | 64.9  | 64.9  | 65.6  | 65.6  | 67.0  |       |
| GE 3200  | 1    | .3                          | 49.7 | 49.7 | 49.7 | 51.0 | 58.7 | 58.7 | 61.5 | 64.2 | 64.6  | 67.3  | 67.3  | 67.0  | 67.0  | 67.7  | 67.7  | 69.1  |       |
| GE 3400  | 1    | .3                          | 50.7 | 51.0 | 51.0 | 53.1 | 61.1 | 61.1 | 63.9 | 66.7 | 67.0  | 69.3  | 69.3  | 69.4  | 69.4  | 70.1  | 70.1  | 71.5  |       |
| GE 3600  | 1    | .3                          | 54.2 | 54.5 | 54.5 | 56.9 | 66.0 | 66.0 | 68.8 | 71.5 | 71.9  | 74.6  | 74.6  | 74.3  | 74.3  | 75.0  | 75.0  | 76.4  |       |
| GE 3800  | 1    | .3                          | 55.6 | 55.9 | 55.9 | 58.3 | 67.4 | 67.4 | 70.1 | 72.9 | 73.3  | 75.7  | 75.7  | 75.7  | 75.7  | 76.4  | 76.4  | 77.8  |       |
| GE 4000  | 1    | .3                          | 56.6 | 56.6 | 56.6 | 59.4 | 68.4 | 68.4 | 71.5 | 74.3 | 74.7  | 76.4  | 76.4  | 77.1  | 77.1  | 77.8  | 77.8  | 79.2  |       |
| GE 4200  | 1    | .3                          | 56.1 | 56.4 | 56.4 | 62.5 | 71.9 | 71.9 | 75.0 | 77.8 | 78.1  | 79.9  | 79.9  | 80.6  | 80.6  | 81.3  | 81.3  | 82.6  |       |
| GE 4400  | 1    | .3                          | 61.4 | 61.4 | 61.4 | 64.6 | 74.3 | 74.3 | 77.8 | 80.9 | 81.3  | 83.0  | 83.0  | 83.7  | 83.7  | 84.4  | 84.4  | 86.1  |       |
| GE 4600  | 1    | .3                          | 61.4 | 61.4 | 61.4 | 64.6 | 74.3 | 74.3 | 77.8 | 80.9 | 81.3  | 83.0  | 83.0  | 83.7  | 83.7  | 84.4  | 84.4  | 86.1  |       |
| GE 4800  | 1    | .3                          | 61.4 | 62.2 | 62.2 | 65.3 | 75.3 | 75.3 | 78.8 | 82.6 | 83.0  | 84.7  | 84.7  | 85.4  | 85.4  | 86.5  | 86.5  | 87.8  |       |
| GE 5000  | 1    | .3                          | 61.4 | 62.2 | 62.2 | 65.3 | 75.3 | 75.3 | 78.8 | 82.6 | 83.0  | 84.7  | 84.7  | 85.4  | 85.4  | 86.5  | 86.5  | 87.8  |       |
| GE 5200  | 1    | .3                          | 63.0 | 63.0 | 63.0 | 67.0 | 77.6 | 77.6 | 81.9 | 87.2 | 87.5  | 89.0  | 89.0  | 90.6  | 90.6  | 91.3  | 91.3  | 92.7  |       |
| GE 5400  | 1    | .3                          | 64.9 | 65.0 | 65.0 | 69.1 | 79.9 | 80.2 | 84.4 | 89.6 | 89.9  | 92.0  | 92.0  | 92.7  | 92.7  | 93.8  | 93.8  | 95.1  |       |
| GE 5600  | 1    | .3                          | 65.3 | 65.6 | 65.6 | 69.4 | 80.6 | 80.9 | 85.1 | 90.3 | 90.6  | 92.7  | 92.7  | 93.8  | 93.8  | 95.1  | 95.1  | 96.5  |       |
| GE 5800  | 1    | .3                          | 65.3 | 65.6 | 65.6 | 69.4 | 80.6 | 80.9 | 85.1 | 90.3 | 90.6  | 92.7  | 92.7  | 93.8  | 93.8  | 95.1  | 95.1  | 96.5  |       |
| GE 6000  | 1    | .3                          | 65.3 | 65.6 | 65.6 | 69.4 | 80.6 | 80.9 | 85.1 | 90.3 | 90.6  | 92.7  | 92.7  | 93.8  | 93.8  | 95.1  | 95.1  | 96.5  |       |
| GE 6200  | 1    | .3                          | 65.3 | 65.6 | 65.6 | 69.4 | 80.6 | 80.9 | 85.1 | 90.3 | 90.6  | 92.7  | 92.7  | 93.8  | 93.8  | 95.1  | 95.1  | 96.5  |       |
| GE 6400  | 1    | .3                          | 65.3 | 65.6 | 65.6 | 69.4 | 80.6 | 80.9 | 85.1 | 90.3 | 90.6  | 92.7  | 92.7  | 93.8  | 93.8  | 95.1  | 95.1  | 96.5  |       |
| GE 6600  | 1    | .3                          | 65.3 | 65.6 | 65.6 | 69.4 | 80.6 | 80.9 | 85.1 | 90.3 | 90.6  | 92.7  | 92.7  | 93.8  | 93.8  | 95.1  | 95.1  | 96.5  |       |
| GE 6800  | 1    | .3                          | 65.3 | 65.6 | 65.6 | 69.4 | 80.6 | 80.9 | 85.1 | 90.3 | 90.6  | 92.7  | 92.7  | 93.8  | 93.8  | 95.1  | 95.1  | 96.5  |       |
| GE 7000  | 1    | .3                          | 65.3 | 65.6 | 65.6 | 69.4 | 80.6 | 80.9 | 85.1 | 90.3 | 90.6  | 92.7  | 92.7  | 93.8  | 93.8  | 95.1  | 95.1  | 96.5  |       |
| GE 7200  | 1    | .3                          | 65.3 | 65.6 | 65.6 | 69.4 | 80.6 | 80.9 | 85.1 | 90.3 | 90.6  | 92.7  | 92.7  | 93.8  | 93.8  | 95.1  | 95.1  | 96.5  |       |
| GE 7400  | 1    | .3                          | 65.3 | 65.6 | 65.6 | 69.4 | 80.6 | 80.9 | 85.1 | 90.3 | 90.6  | 92.7  | 92.7  | 93.8  | 93.8  | 95.1  | 95.1  | 96.5  |       |
| GE 7600  | 1    | .3                          | 65.3 | 65.6 | 65.6 | 69.4 | 80.6 | 80.9 | 85.1 | 90.3 | 90.6  | 92.7  | 92.7  | 93.8  | 93.8  | 95.1  | 95.1  | 96.5  |       |
| GE 7800  | 1    | .3                          | 65.3 | 65.6 | 65.6 | 69.4 | 80.6 | 80.9 | 85.1 | 90.3 | 90.6  | 92.7  | 92.7  | 93.8  | 93.8  | 95.1  | 95.1  | 96.5  |       |
| GE 8000  | 1    | .3                          | 65.3 | 65.6 | 65.6 | 69.4 | 80.6 | 80.9 | 85.1 | 90.3 | 90.6  | 92.7  | 92.7  | 93.8  | 93.8  | 95.1  | 95.1  | 96.5  |       |
| GE 8200  | 1    | .3                          | 65.3 | 65.6 | 65.6 | 69.4 | 80.6 | 80.9 | 85.1 | 90.3 | 90.6  | 92.7  | 92.7  | 93.8  | 93.8  | 95.1  | 95.1  | 96.5  |       |
| GE 8400  | 1    | .3                          | 65.3 | 65.6 | 65.6 | 69.4 | 80.6 | 80.9 | 85.1 | 90.3 | 90.6  | 92.7  | 92.7  | 93.8  | 93.8  | 95.1  | 95.1  | 96.5  |       |
| GE 8600  | 1    | .3                          | 65.3 | 65.6 | 65.6 | 69.4 | 80.6 | 80.9 | 85.1 | 90.3 | 90.6  | 92.7  | 92.7  | 93.8  | 93.8  | 95.1  | 95.1  | 96.5  |       |
| GE 8800  | 1    | .3                          | 65.3 | 65.6 | 65.6 | 69.4 | 80.6 | 80.9 | 85.1 | 90.3 | 90.6  | 92.7  | 92.7  | 93.8  | 93.8  | 95.1  | 95.1  | 96.5  |       |
| GE 9000  | 1    | .3                          | 65.3 | 65.6 | 65.6 | 69.4 | 80.6 | 80.9 | 85.1 | 90.3 | 90.6  | 92.7  | 92.7  | 93.8  | 93.8  | 95.1  | 95.1  | 96.5  |       |
| GE 9200  | 1    | .3                          | 65.3 | 65.6 | 65.6 | 69.4 | 80.6 | 80.9 | 85.1 | 90.3 | 90.6  | 92.7  | 92.7  | 93.8  | 93.8  | 95.1  | 95.1  | 96.5  |       |
| GE 9400  | 1    | .3                          | 65.3 | 65.6 | 65.6 | 69.4 | 80.6 | 80.9 | 85.1 | 90.3 | 90.6  | 92.7  | 92.7  | 93.8  | 93.8  | 95.1  | 95.1  | 96.5  |       |
| GE 9600  | 1    | .3                          | 65.3 | 65.6 | 65.6 | 69.4 | 80.6 | 80.9 | 85.1 | 90.3 | 90.6  | 92.7  | 92.7  | 93.8  | 93.8  | 95.1  | 95.1  | 96.5  |       |
| GE 9800  | 1    | .3                          | 65.3 | 65.6 | 65.6 | 69.4 | 80.6 | 80.9 | 85.1 | 90.3 | 90.6  | 92.7  | 92.7  | 93.8  | 93.8  | 95.1  | 95.1  | 96.5  |       |
| GE 10000 | 1    | .3                          | 65.3 | 65.6 | 65.6 | 69.4 | 80.6 | 80.9 | 85.1 | 90.3 | 90.6  | 92.7  | 92.7  | 93.8  | 93.8  | 95.1  | 95.1  | 96.5  |       |

TOTAL NUMBER OF OBSERVATIONS: 258

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MTC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 27595 STATION NAME: MAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: SEP HOURS(IST): 0900-1100

| CEILING<br>IN<br>FEET | 1   | FE<br>10 | GE<br>6 | GE<br>7 | GE<br>8 | GE<br>9 | GE<br>10 | GE<br>11 | GE<br>12 | GE<br>13 | GE<br>14 | GE<br>15 | GE<br>16 | GE<br>17 | GE<br>18 | GE<br>19 | GE<br>20 |
|-----------------------|-----|----------|---------|---------|---------|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
|                       |     |          |         |         |         |         |          |          |          |          |          |          |          |          |          |          |          |
| NO CEIL               | 1   |          | 19.9    | 27.9    | 29.9    | 31.3    | 32.6     | 32.6     | 33.3     | 33.3     | 33.3     | 33.3     | 33.3     | 33.3     | 33.3     | 33.3     | 33.3     |
| GE 0000               |     |          | 19.9    | 35.1    | 35.1    | 35.1    | 36.4     | 37.8     | 37.8     | 38.5     | 38.5     | 38.5     | 38.5     | 38.5     | 38.5     | 38.5     | 38.5     |
| GE 1000               |     |          | 19.9    | 35.1    | 35.1    | 35.1    | 36.4     | 37.8     | 37.8     | 38.5     | 38.5     | 38.5     | 38.5     | 38.5     | 38.5     | 38.5     | 38.5     |
| GE 1400               |     |          | 19.9    | 35.1    | 35.1    | 35.1    | 36.4     | 37.8     | 37.8     | 38.5     | 38.5     | 38.5     | 38.5     | 38.5     | 38.5     | 38.5     | 38.5     |
| GE 1800               |     |          | 19.9    | 35.1    | 35.1    | 35.1    | 36.4     | 37.8     | 37.8     | 38.5     | 38.5     | 38.5     | 38.5     | 38.5     | 38.5     | 38.5     | 38.5     |
| GE 2200               |     |          | 19.9    | 35.1    | 35.1    | 35.1    | 36.4     | 37.8     | 37.8     | 38.5     | 38.5     | 38.5     | 38.5     | 38.5     | 38.5     | 38.5     | 38.5     |
| GE 0000               | .7  | 47.1     | 47.1    | 47.1    | 47.1    | 49.1    | 51.5     | 51.5     | 52.2     | 52.6     | 52.6     | 52.6     | 52.6     | 52.6     | 52.6     | 52.6     | 52.6     |
| GE 0400               | .3  | 47.1     | 47.1    | 47.1    | 47.1    | 49.1    | 51.5     | 51.5     | 52.2     | 52.6     | 52.6     | 52.6     | 52.6     | 52.6     | 52.6     | 52.6     | 52.6     |
| GE 0800               | .3  | 47.1     | 47.1    | 47.1    | 47.1    | 49.1    | 51.5     | 51.5     | 52.2     | 52.6     | 52.6     | 52.6     | 52.6     | 52.6     | 52.6     | 52.6     | 52.6     |
| GE 1200               | .3  | 47.1     | 47.1    | 47.1    | 47.1    | 49.1    | 51.5     | 51.5     | 52.2     | 52.6     | 52.6     | 52.6     | 52.6     | 52.6     | 52.6     | 52.6     | 52.6     |
| GE 1600               | .3  | 47.1     | 47.1    | 47.1    | 47.1    | 49.1    | 51.5     | 51.5     | 52.2     | 52.6     | 52.6     | 52.6     | 52.6     | 52.6     | 52.6     | 52.6     | 52.6     |
| GE 2000               | .7  | 51.5     | 52.2    | 52.2    | 52.2    | 53.6    | 57.0     | 57.0     | 58.4     | 58.4     | 58.4     | 58.4     | 58.4     | 58.4     | 58.4     | 58.4     | 58.4     |
| GE 0000               | .7  | 52.2     | 52.2    | 52.2    | 52.2    | 54.3    | 57.7     | 57.7     | 58.8     | 59.1     | 59.1     | 59.1     | 59.1     | 59.1     | 59.1     | 59.1     | 59.1     |
| GE 0400               | .7  | 55.3     | 55.7    | 55.7    | 55.7    | 57.0    | 60.5     | 60.5     | 61.5     | 61.9     | 61.9     | 61.9     | 61.9     | 61.9     | 61.9     | 61.9     | 61.9     |
| GE 0800               | .7  | 55.3     | 55.7    | 55.7    | 55.7    | 57.4    | 60.8     | 60.8     | 61.9     | 62.2     | 62.2     | 62.2     | 62.2     | 62.2     | 62.2     | 62.2     | 62.2     |
| GE 1200               | .7  | 56.7     | 57.4    | 57.4    | 57.4    | 58.8    | 62.2     | 62.2     | 63.2     | 63.6     | 63.6     | 63.6     | 63.6     | 63.6     | 63.6     | 63.6     | 63.6     |
| GE 1600               | 1.4 | 59.8     | 60.5    | 60.5    | 60.5    | 61.9    | 65.6     | 65.6     | 66.7     | 67.0     | 67.0     | 67.0     | 67.0     | 67.0     | 67.0     | 67.0     | 67.0     |
| GE 2000               | 1.4 | 62.5     | 63.2    | 63.2    | 63.2    | 64.6    | 68.4     | 68.4     | 69.4     | 69.8     | 69.8     | 69.8     | 69.8     | 69.8     | 69.8     | 69.8     | 69.8     |
| GE 0000               | 1.4 | 64.6     | 65.3    | 65.3    | 65.3    | 66.7    | 70.4     | 70.4     | 71.5     | 71.8     | 71.8     | 71.8     | 71.8     | 71.8     | 71.8     | 71.8     | 71.8     |
| GE 0400               | 1.4 | 67.7     | 68.4    | 68.4    | 68.4    | 69.8    | 73.5     | 73.5     | 74.6     | 74.9     | 74.9     | 74.9     | 74.9     | 74.9     | 74.9     | 74.9     | 74.9     |
| GE 0800               | 1.4 | 70.8     | 71.5    | 71.5    | 71.5    | 73.2    | 77.3     | 77.3     | 78.4     | 78.7     | 78.7     | 78.7     | 78.7     | 78.7     | 78.7     | 78.7     | 78.7     |
| GE 1200               | 1.4 | 74.1     | 74.9    | 74.9    | 74.9    | 76.6    | 80.8     | 80.8     | 81.8     | 82.2     | 82.2     | 82.2     | 82.2     | 82.2     | 82.2     | 82.2     | 82.2     |
| GE 1600               | 1.4 | 76.3     | 77.1    | 77.1    | 77.1    | 78.7    | 82.8     | 82.8     | 84.2     | 84.5     | 84.5     | 84.5     | 84.5     | 84.5     | 84.5     | 84.5     | 84.5     |
| GE 2000               | 1.4 | 78.3     | 79.1    | 79.1    | 79.1    | 80.8    | 84.8     | 84.8     | 86.3     | 86.6     | 86.6     | 86.6     | 86.6     | 86.6     | 86.6     | 86.6     | 86.6     |
| GE 0000               | 1.4 | 77.3     | 78.1    | 78.1    | 78.1    | 80.4    | 84.6     | 84.6     | 86.2     | 86.7     | 86.7     | 86.7     | 86.7     | 86.7     | 86.7     | 86.7     | 86.7     |
| GE 0400               | 1.4 | 78.4     | 79.2    | 79.2    | 79.2    | 81.3    | 85.0     | 85.0     | 86.9     | 87.4     | 87.4     | 87.4     | 87.4     | 87.4     | 87.4     | 87.4     | 87.4     |
| GE 0800               | 1.4 | 79.1     | 79.7    | 79.7    | 79.7    | 82.5    | 86.4     | 86.4     | 88.1     | 88.6     | 88.6     | 88.6     | 88.6     | 88.6     | 88.6     | 88.6     | 88.6     |
| GE 1200               | 1.4 | 80.4     | 81.1    | 81.1    | 81.1    | 84.2    | 88.4     | 88.4     | 90.1     | 90.6     | 90.6     | 90.6     | 90.6     | 90.6     | 90.6     | 90.6     | 90.6     |
| GE 1600               | 1.4 | 80.4     | 81.1    | 81.1    | 81.1    | 84.2    | 88.4     | 88.4     | 90.1     | 90.6     | 90.6     | 90.6     | 90.6     | 90.6     | 90.6     | 90.6     | 90.6     |
| GE 2000               | 1.4 | 80.4     | 81.1    | 81.1    | 81.1    | 84.2    | 88.4     | 88.4     | 90.1     | 90.6     | 90.6     | 90.6     | 90.6     | 90.6     | 90.6     | 90.6     | 90.6     |
| GE 0000               | 1.4 | 80.4     | 81.1    | 81.1    | 81.1    | 84.2    | 88.4     | 88.4     | 90.1     | 90.6     | 90.6     | 90.6     | 90.6     | 90.6     | 90.6     | 90.6     | 90.6     |
| GE 0400               | 1.4 | 80.4     | 81.1    | 81.1    | 81.1    | 84.2    | 88.4     | 88.4     | 90.1     | 90.6     | 90.6     | 90.6     | 90.6     | 90.6     | 90.6     | 90.6     | 90.6     |
| GE 0800               | 1.4 | 80.4     | 81.1    | 81.1    | 81.1    | 84.2    | 88.4     | 88.4     | 90.1     | 90.6     | 90.6     | 90.6     | 90.6     | 90.6     | 90.6     | 90.6     | 90.6     |
| GE 1200               | 1.4 | 80.4     | 81.1    | 81.1    | 81.1    | 84.2    | 88.4     | 88.4     | 90.1     | 90.6     | 90.6     | 90.6     | 90.6     | 90.6     | 90.6     | 90.6     | 90.6     |
| GE 1600               | 1.4 | 80.4     | 81.1    | 81.1    | 81.1    | 84.2    | 88.4     | 88.4     | 90.1     | 90.6     | 90.6     | 90.6     | 90.6     | 90.6     | 90.6     | 90.6     | 90.6     |
| GE 2000               | 1.4 | 80.4     | 81.1    | 81.1    | 81.1    | 84.2    | 88.4     | 88.4     | 90.1     | 90.6     | 90.6     | 90.6     | 90.6     | 90.6     | 90.6     | 90.6     | 90.6     |

TOTAL NUMBER OF OBSERVATIONS: 241

GLOBAL CLIMATOLOGY BRANCH  
LSAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 27595 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 79-87  
MONTH: SEP HOURS(IST): 1200-1400

| CEILING<br>IN<br>FEET | J | GE | GE   | GE   | GE   | GE   | GE    | VISIBILITY IN STATUTE MILES |       |       |      |      |      |      |      |      |      |
|-----------------------|---|----|------|------|------|------|-------|-----------------------------|-------|-------|------|------|------|------|------|------|------|
|                       |   |    |      |      |      |      |       | GE                          | GE    | GE    | GE   | GE   | GE   | GE   | GE   | GE   | GE   |
|                       |   | 1  | 10   | 5    | 4    | 3    | 2 1/2 | 2                           | 1 1/2 | 1 1/4 | 1    | 3/4  | 5/8  | 1/2  | 5/16 | 1/4  | 0    |
| NO CEIL               | 1 | .4 | 29.6 | 29.6 | 29.6 | 29.6 | 27.1  | 27.1                        | 27.1  | 27.1  | 27.1 | 27.1 | 27.1 | 27.1 | 27.1 | 27.1 | 27.1 |
| GE 20000              | 1 | .4 | 29.6 | 29.6 | 29.6 | 29.6 | 29.9  | 29.9                        | 29.9  | 29.9  | 29.9 | 29.9 | 29.9 | 29.9 | 29.9 | 29.9 | 29.9 |
| GE 18000              | 1 | .4 | 29.6 | 29.6 | 29.6 | 29.6 | 29.9  | 29.9                        | 29.9  | 29.9  | 29.9 | 29.9 | 29.9 | 29.9 | 29.9 | 29.9 | 29.9 |
| GE 16000              | 1 | .4 | 29.6 | 29.6 | 29.6 | 29.6 | 29.9  | 29.9                        | 29.9  | 29.9  | 29.9 | 29.9 | 29.9 | 29.9 | 29.9 | 29.9 | 29.9 |
| GE 14000              | 1 | .4 | 29.6 | 29.6 | 29.6 | 29.6 | 29.9  | 29.9                        | 29.9  | 29.9  | 29.9 | 29.9 | 29.9 | 29.9 | 29.9 | 29.9 | 29.9 |
| GE 12000              | 1 | .4 | 29.6 | 29.6 | 29.6 | 29.6 | 29.9  | 29.9                        | 29.9  | 29.9  | 29.9 | 29.9 | 29.9 | 29.9 | 29.9 | 29.9 | 29.9 |
| GE 10000              | 1 | .7 | 44.0 | 44.0 | 44.0 | 44.4 | 45.4  | 45.4                        | 45.4  | 45.4  | 45.4 | 45.4 | 45.4 | 45.4 | 45.4 | 45.4 | 45.8 |
| GE 9000               | 1 | .7 | 44.0 | 44.0 | 44.0 | 44.4 | 45.4  | 45.4                        | 45.4  | 45.4  | 45.4 | 45.4 | 45.4 | 45.4 | 45.4 | 45.4 | 45.8 |
| GE 8000               | 1 | .7 | 44.0 | 44.0 | 44.0 | 44.4 | 45.4  | 45.4                        | 45.4  | 45.4  | 45.4 | 45.4 | 45.4 | 45.4 | 45.4 | 45.4 | 45.8 |
| GE 7000               | 1 | .7 | 44.0 | 44.0 | 44.0 | 44.4 | 45.4  | 45.4                        | 45.4  | 45.4  | 45.4 | 45.4 | 45.4 | 45.4 | 45.4 | 45.4 | 45.8 |
| GE 6000               | 1 | .7 | 44.7 | 44.7 | 44.7 | 45.1 | 46.1  | 46.1                        | 46.1  | 46.1  | 46.1 | 46.1 | 46.1 | 46.1 | 46.1 | 46.1 | 46.5 |
| GE 5000               | 1 | .7 | 47.9 | 47.9 | 47.9 | 48.2 | 49.3  | 49.3                        | 49.3  | 49.3  | 49.3 | 49.3 | 49.3 | 49.3 | 49.3 | 49.3 | 49.6 |
| GE 4000               | 1 | .7 | 48.9 | 48.9 | 48.9 | 49.3 | 50.4  | 50.4                        | 50.4  | 50.4  | 50.4 | 50.4 | 50.4 | 50.4 | 50.4 | 50.4 | 50.7 |
| GE 3500               | 1 | .7 | 55.6 | 55.6 | 55.6 | 56.0 | 57.4  | 57.4                        | 57.4  | 57.4  | 57.4 | 57.4 | 57.4 | 57.4 | 57.4 | 57.4 | 57.7 |
| GE 3000               | 1 | .7 | 57.4 | 57.4 | 57.4 | 57.7 | 59.2  | 59.2                        | 59.2  | 59.2  | 59.2 | 59.2 | 59.2 | 59.2 | 59.2 | 59.2 | 59.5 |
| GE 2500               | 1 | .7 | 60.9 | 60.9 | 60.9 | 61.3 | 62.7  | 62.7                        | 62.7  | 62.7  | 62.7 | 62.7 | 62.7 | 62.7 | 62.7 | 62.7 | 63.0 |
| GE 2000               | 1 | .7 | 70.1 | 70.1 | 70.1 | 70.4 | 72.5  | 72.5                        | 72.5  | 72.5  | 72.5 | 72.5 | 72.5 | 72.5 | 72.5 | 72.5 | 72.9 |
| GE 1800               | 1 | .7 | 76.1 | 76.1 | 76.1 | 76.4 | 78.9  | 78.9                        | 78.9  | 78.9  | 78.9 | 78.9 | 78.9 | 78.9 | 78.9 | 78.9 | 79.2 |
| GE 1600               | 1 | .7 | 78.5 | 78.5 | 78.5 | 78.9 | 81.3  | 81.3                        | 81.3  | 81.3  | 81.3 | 81.3 | 81.3 | 81.3 | 81.3 | 81.3 | 81.7 |
| GE 1400               | 1 | .7 | 82.7 | 82.7 | 82.7 | 83.1 | 85.6  | 85.6                        | 85.6  | 85.6  | 85.6 | 85.6 | 85.6 | 85.6 | 85.6 | 85.6 | 85.9 |
| GE 1200               | 1 | .7 | 86.3 | 86.3 | 86.3 | 86.6 | 89.0  | 89.0                        | 89.0  | 89.0  | 89.0 | 89.0 | 89.0 | 89.0 | 89.0 | 89.0 | 89.3 |
| GE 1000               | 1 | .7 | 88.7 | 88.7 | 88.7 | 89.1 | 91.5  | 91.5                        | 91.5  | 91.5  | 91.5 | 91.5 | 91.5 | 91.5 | 91.5 | 91.5 | 91.8 |
| GE 900                | 1 | .7 | 89.1 | 89.1 | 89.1 | 89.4 | 91.8  | 91.8                        | 91.8  | 91.8  | 91.8 | 91.8 | 91.8 | 91.8 | 91.8 | 91.8 | 92.1 |
| GE 800                | 1 | .7 | 89.4 | 89.4 | 89.4 | 89.7 | 92.1  | 92.1                        | 92.1  | 92.1  | 92.1 | 92.1 | 92.1 | 92.1 | 92.1 | 92.1 | 92.4 |
| GE 700                | 1 | .7 | 90.1 | 90.1 | 90.1 | 90.4 | 92.8  | 92.8                        | 92.8  | 92.8  | 92.8 | 92.8 | 92.8 | 92.8 | 92.8 | 92.8 | 93.1 |
| GE 600                | 1 | .7 | 91.2 | 91.2 | 91.2 | 91.5 | 93.9  | 93.9                        | 93.9  | 93.9  | 93.9 | 93.9 | 93.9 | 93.9 | 93.9 | 93.9 | 94.2 |
| GE 500                | 1 | .7 | 92.3 | 92.3 | 92.3 | 92.6 | 95.0  | 95.0                        | 95.0  | 95.0  | 95.0 | 95.0 | 95.0 | 95.0 | 95.0 | 95.0 | 95.3 |
| GE 400                | 1 | .7 | 92.6 | 92.6 | 92.6 | 92.9 | 95.3  | 95.3                        | 95.3  | 95.3  | 95.3 | 95.3 | 95.3 | 95.3 | 95.3 | 95.3 | 95.6 |
| GE 300                | 1 | .7 | 92.6 | 92.6 | 92.6 | 92.9 | 95.3  | 95.3                        | 95.3  | 95.3  | 95.3 | 95.3 | 95.3 | 95.3 | 95.3 | 95.3 | 95.6 |
| GE 200                | 1 | .7 | 92.6 | 92.6 | 92.6 | 92.9 | 95.3  | 95.3                        | 95.3  | 95.3  | 95.3 | 95.3 | 95.3 | 95.3 | 95.3 | 95.3 | 95.6 |
| GE 100                | 1 | .7 | 92.6 | 92.6 | 92.6 | 92.9 | 95.3  | 95.3                        | 95.3  | 95.3  | 95.3 | 95.3 | 95.3 | 95.3 | 95.3 | 95.3 | 95.6 |
| GE                    | 1 | .7 | 92.6 | 92.6 | 92.6 | 92.9 | 95.3  | 95.3                        | 95.3  | 95.3  | 95.3 | 95.3 | 95.3 | 95.3 | 95.3 | 95.3 | 95.6 |

TOTAL NUMBER OF OBSERVATIONS: 264

PERCENTAGE FREQUENCY OF OCCURRENCE OF CFILING VERSUS VISIBILITY  
FROM FOURLY OBSERVATIONS

PERIOD OF RECORD: 78-87  
MONTH: SEP HOURS(LST): 1500-1700

| NO | CEILING<br>IN<br>FEET | VISTIBILITY IN STATUTE MILES |      |      |      |      |       |      |       |       |      |      |      |      |      |      |      |
|----|-----------------------|------------------------------|------|------|------|------|-------|------|-------|-------|------|------|------|------|------|------|------|
|    |                       | GE                           | GF   | GF   | GF   | GE   | GF    | GE   | GF    | GE    | GE   | GE   | GF   | GE   | GE   |      |      |
|    |                       | 10                           | 0    | 5    | 4    | 3    | 2 1/2 | 2    | 1 1/2 | 1 1/4 | 1    | 3/4  | 5/8  | 1/2  | 5/16 | 1/4  | 0    |
| NO | CEIL                  | 1                            | .7   | 27.6 | 27.6 | 27.6 | 27.6  | 27.6 | 27.6  | 27.6  | 27.6 | 27.6 | 27.6 | 27.6 | 27.6 | 27.6 | 27.6 |
| GE | 207000                | .7                           | 30.0 | 30.0 | 30.0 | 30.0 | 30.0  | 30.0 | 30.0  | 30.0  | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 |
| GE | 180000                | .7                           | 30.0 | 30.0 | 30.0 | 30.0 | 30.0  | 30.0 | 30.0  | 30.0  | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 |
| GE | 160000                | .7                           | 30.0 | 30.0 | 30.0 | 30.0 | 30.0  | 30.0 | 30.0  | 30.0  | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 |
| GE | 140000                | .7                           | 30.0 | 30.0 | 30.0 | 30.0 | 30.0  | 30.0 | 30.0  | 30.0  | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 |
| GE | 120000                | .7                           | 30.0 | 30.0 | 30.0 | 30.0 | 30.0  | 30.0 | 30.0  | 30.0  | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 | 30.0 |
| GE | 100000                | 1.0                          | 45.7 | 45.7 | 45.7 | 45.7 | 46.1  | 46.1 | 46.1  | 46.1  | 46.1 | 46.1 | 46.1 | 46.1 | 46.1 | 46.1 | 46.1 |
| GE | 90000                 | 1.0                          | 45.7 | 45.7 | 45.7 | 45.7 | 46.1  | 46.1 | 46.1  | 46.1  | 46.1 | 46.1 | 46.1 | 46.1 | 46.1 | 46.1 | 46.1 |
| GE | 80000                 | 1.0                          | 45.7 | 45.7 | 45.7 | 45.7 | 46.1  | 46.1 | 46.1  | 46.1  | 46.1 | 46.1 | 46.1 | 46.1 | 46.1 | 46.1 | 46.1 |
| GE | 70000                 | 1.0                          | 45.7 | 45.7 | 45.7 | 45.7 | 46.1  | 46.1 | 46.1  | 46.1  | 46.1 | 46.1 | 46.1 | 46.1 | 46.1 | 46.1 | 46.1 |
| GE | 60000                 | 1.0                          | 45.7 | 45.7 | 45.7 | 45.7 | 46.1  | 46.1 | 46.1  | 46.1  | 46.1 | 46.1 | 46.1 | 46.1 | 46.1 | 46.1 | 46.1 |
| GE | 50000                 | 1.0                          | 53.2 | 53.2 | 53.2 | 53.2 | 53.6  | 53.6 | 53.6  | 53.6  | 53.6 | 53.6 | 53.6 | 53.6 | 53.6 | 53.6 | 53.6 |
| GE | 45000                 | 1.0                          | 54.3 | 54.3 | 54.3 | 54.3 | 54.9  | 54.9 | 54.9  | 54.9  | 54.9 | 54.9 | 54.9 | 54.9 | 54.9 | 54.9 | 54.9 |
| GE | 40000                 | 1.0                          | 64.5 | 64.5 | 64.5 | 64.5 | 65.2  | 65.2 | 65.2  | 65.2  | 65.2 | 65.2 | 65.2 | 65.2 | 65.2 | 65.2 | 65.2 |
| GE | 35000                 | 1.0                          | 66.2 | 66.2 | 66.2 | 66.2 | 66.9  | 66.9 | 66.9  | 66.9  | 66.9 | 66.9 | 66.9 | 66.9 | 66.9 | 66.9 | 66.9 |
| GE | 30000                 | 1.0                          | 71.3 | 71.3 | 71.3 | 71.3 | 72.0  | 72.0 | 72.0  | 72.0  | 72.0 | 72.0 | 72.0 | 72.0 | 72.0 | 72.0 | 72.0 |
| GE | 25000                 | 1.0                          | 80.5 | 80.5 | 80.5 | 80.5 | 81.2  | 81.2 | 81.2  | 81.2  | 81.2 | 81.2 | 81.2 | 81.2 | 81.2 | 81.2 | 81.2 |
| GE | 20000                 | 1.0                          | 86.7 | 86.7 | 86.7 | 86.7 | 86.7  | 86.7 | 86.7  | 86.7  | 86.7 | 86.7 | 86.7 | 86.7 | 86.7 | 86.7 | 86.7 |
| GE | 15000                 | 1.0                          | 87.4 | 87.4 | 87.4 | 87.4 | 87.4  | 87.4 | 87.4  | 87.4  | 87.4 | 87.4 | 87.4 | 87.4 | 87.4 | 87.4 | 87.4 |
| GE | 10000                 | 1.0                          | 88.4 | 88.4 | 88.4 | 88.4 | 89.1  | 89.1 | 89.1  | 89.1  | 89.1 | 89.1 | 89.1 | 89.1 | 89.1 | 89.1 | 89.1 |
| GE | 5000                  | 1.0                          | 91.3 | 91.3 | 91.3 | 92.2 | 93.2  | 93.2 | 93.2  | 93.2  | 93.2 | 93.2 | 93.2 | 93.2 | 93.2 | 93.2 | 93.2 |
| GE | 2000                  | 1.0                          | 94.2 | 94.2 | 94.2 | 94.5 | 95.6  | 95.6 | 95.6  | 95.6  | 95.6 | 95.6 | 95.6 | 95.6 | 95.6 | 95.6 | 95.6 |
| GE | 1000                  | 1.0                          | 94.2 | 94.2 | 94.2 | 94.5 | 95.9  | 95.9 | 95.9  | 95.9  | 96.2 | 96.2 | 96.2 | 96.2 | 96.2 | 96.2 | 96.2 |
| GE | 500                   | 1.0                          | 94.2 | 94.2 | 94.2 | 94.5 | 95.9  | 95.9 | 95.9  | 95.9  | 96.2 | 96.2 | 96.2 | 96.2 | 96.2 | 96.2 | 96.2 |
| GE | 200                   | 1.0                          | 94.5 | 94.5 | 94.5 | 94.9 | 96.2  | 96.2 | 96.2  | 96.6  | 96.6 | 96.6 | 96.6 | 96.6 | 96.6 | 96.6 | 96.6 |
| GE | 100                   | 1.0                          | 95.9 | 95.9 | 95.9 | 96.6 | 98.3  | 98.3 | 98.3  | 99.0  | 99.0 | 99.0 | 99.0 | 99.0 | 99.0 | 99.0 | 99.0 |
| GE | 50                    | 1.0                          | 95.9 | 95.9 | 95.9 | 96.6 | 98.6  | 98.6 | 98.6  | 99.3  | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 |
| GE | 20                    | 1.0                          | 95.9 | 95.9 | 95.9 | 96.6 | 98.6  | 98.6 | 98.6  | 99.3  | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 |
| GE | 10                    | 1.0                          | 95.9 | 95.9 | 95.9 | 96.6 | 98.6  | 98.6 | 98.6  | 99.3  | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 |
| GE | 5                     | 1.0                          | 95.9 | 95.9 | 95.9 | 96.6 | 98.6  | 98.6 | 98.6  | 99.3  | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 |
| GE | 1                     | 1.0                          | 95.9 | 95.9 | 95.9 | 96.6 | 98.6  | 98.6 | 98.6  | 99.3  | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 | 99.3 |

TOTAL NUMBER OF OBSERVATIONS: 227

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

PERIOD OF RECORD: 78-87  
MONTH: SEP HOURS (LST): 1800-2000

[illegible]

TOTAL NUMBER OF OBSERVATIONS: 201

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

PERIOD OF RECORD: 78-67  
MONTH: SEE HOURS(LST): 2100-2300

| CEILING   | VISIBILITY IN STATUTE MILES |      |      |      |      |      |      |      |      |      |       |       |       |       |       |       |
|-----------|-----------------------------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|
|           | IN FEET                     | GE 1 | GE 2 | GE 3 | GE 4 | GE 5 | GE 6 | GE 7 | GE 8 | GE 9 | GE 10 | GE 11 | GE 12 | GE 13 | GE 14 | GE 15 |
| AC CLIL 1 | 1.0                         | 39.7 | 39.7 | 39.7 | 40.1 | 41.4 | 41.4 | 41.4 | 41.4 | 41.8 | 42.1  | 42.1  | 42.1  | 42.1  | 42.1  | 42.1  |
| GE 200001 | 1.0                         | 40.4 | 40.4 | 40.4 | 40.8 | 42.1 | 42.1 | 42.1 | 42.5 | 42.8 | 42.8  | 42.8  | 42.8  | 42.8  | 42.8  | 42.8  |
| GE 100001 | 1.0                         | 40.4 | 40.4 | 40.4 | 40.8 | 42.1 | 42.1 | 42.1 | 42.5 | 42.8 | 42.8  | 42.8  | 42.8  | 42.8  | 42.8  | 42.8  |
| GE 160001 | 1.0                         | 40.4 | 40.4 | 40.4 | 40.8 | 42.1 | 42.1 | 42.1 | 42.5 | 42.8 | 42.8  | 42.8  | 42.8  | 42.8  | 42.8  | 42.8  |
| GE 140001 | 1.0                         | 40.4 | 40.4 | 40.4 | 40.8 | 42.1 | 42.1 | 42.1 | 42.5 | 42.8 | 42.8  | 42.8  | 42.8  | 42.8  | 42.8  | 42.8  |
| GE 120001 | 1.0                         | 40.4 | 40.4 | 40.4 | 40.8 | 42.1 | 42.1 | 42.1 | 42.5 | 42.8 | 42.8  | 42.8  | 42.8  | 42.8  | 42.8  | 42.8  |
| GE 100001 | 1.0                         | 60.3 | 60.3 | 60.3 | 60.6 | 62.7 | 62.7 | 62.7 | 63.0 | 63.4 | 63.4  | 63.4  | 63.4  | 63.4  | 63.4  | 63.4  |
| GE 900001 | 1.0                         | 60.3 | 60.3 | 60.3 | 60.6 | 62.7 | 62.7 | 62.7 | 63.0 | 63.4 | 63.4  | 63.4  | 63.4  | 63.4  | 63.4  | 63.4  |
| GE 800001 | 1.0                         | 60.3 | 60.3 | 60.3 | 60.6 | 62.7 | 62.7 | 62.7 | 63.0 | 63.4 | 63.4  | 63.4  | 63.4  | 63.4  | 63.4  | 63.4  |
| GE 700001 | 1.0                         | 60.3 | 60.3 | 60.3 | 60.6 | 62.7 | 62.7 | 62.7 | 63.0 | 63.4 | 63.4  | 63.4  | 63.4  | 63.4  | 63.4  | 63.4  |
| GE 600001 | 1.0                         | 61.0 | 61.0 | 61.0 | 61.3 | 63.4 | 63.4 | 63.4 | 63.7 | 64.0 | 64.0  | 64.0  | 64.0  | 64.0  | 64.0  | 64.0  |
| GE 500001 | 1.4                         | 67.5 | 67.5 | 67.5 | 68.2 | 70.2 | 70.2 | 70.2 | 70.5 | 70.9 | 70.9  | 70.9  | 70.9  | 70.9  | 70.9  | 70.9  |
| GE 400001 | 1.4                         | 67.5 | 67.5 | 67.5 | 68.2 | 70.2 | 70.2 | 70.2 | 70.5 | 70.9 | 70.9  | 70.9  | 70.9  | 70.9  | 70.9  | 70.9  |
| GE 300001 | 1.4                         | 74.3 | 74.3 | 74.3 | 75.3 | 77.7 | 77.7 | 77.7 | 78.1 | 78.4 | 78.4  | 78.4  | 78.4  | 78.4  | 78.4  | 78.4  |
| GE 200001 | 1.4                         | 75.7 | 75.7 | 75.7 | 77.1 | 79.5 | 79.5 | 79.5 | 79.8 | 80.1 | 80.1  | 80.1  | 80.1  | 80.1  | 80.1  | 80.1  |
| GE 100001 | 1.4                         | 77.1 | 77.1 | 77.1 | 78.4 | 80.8 | 80.8 | 80.8 | 81.2 | 81.5 | 81.5  | 81.5  | 81.5  | 81.5  | 81.5  | 81.5  |
| GE 200001 | 1.4                         | 80.1 | 80.1 | 80.1 | 81.5 | 84.6 | 84.6 | 84.6 | 84.9 | 85.3 | 85.3  | 85.3  | 85.3  | 85.3  | 85.3  | 85.3  |
| GE 100001 | 1.4                         | 81.5 | 81.5 | 81.5 | 82.9 | 86.3 | 86.3 | 86.3 | 86.6 | 87.3 | 87.3  | 87.3  | 87.3  | 87.3  | 87.3  | 87.3  |
| GE 100001 | 1.4                         | 82.9 | 82.9 | 82.9 | 83.6 | 87.3 | 87.3 | 87.3 | 87.7 | 88.4 | 88.4  | 88.4  | 88.4  | 88.4  | 88.4  | 88.4  |
| GE 100001 | 1.4                         | 84.6 | 84.6 | 84.6 | 86.3 | 89.7 | 89.7 | 89.7 | 90.1 | 90.4 | 90.4  | 90.4  | 90.4  | 90.4  | 90.4  | 90.4  |
| GE 100001 | 1.4                         | 87.0 | 87.0 | 87.0 | 88.7 | 92.5 | 92.5 | 92.5 | 92.8 | 93.5 | 93.5  | 93.5  | 93.5  | 93.5  | 93.5  | 93.5  |
| GE 100001 | 1.4                         | 87.7 | 87.7 | 87.7 | 89.4 | 93.5 | 93.5 | 93.5 | 93.8 | 94.5 | 94.5  | 94.5  | 94.5  | 94.5  | 94.5  | 94.5  |
| GE 100001 | 1.4                         | 88.7 | 88.7 | 88.7 | 90.7 | 94.9 | 94.9 | 94.9 | 95.2 | 95.9 | 95.9  | 95.9  | 95.9  | 95.9  | 95.9  | 95.9  |
| GE 100001 | 1.4                         | 89.4 | 89.4 | 89.4 | 91.4 | 95.9 | 95.9 | 95.9 | 96.2 | 96.9 | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  |
| GE 100001 | 1.4                         | 90.4 | 90.4 | 90.4 | 91.4 | 95.9 | 95.9 | 95.9 | 96.2 | 96.9 | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  |
| GE 100001 | 1.4                         | 90.4 | 90.4 | 90.4 | 91.4 | 95.9 | 95.9 | 95.9 | 96.2 | 96.9 | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  |
| GE 100001 | 1.4                         | 90.4 | 90.4 | 90.4 | 91.4 | 95.9 | 95.9 | 95.9 | 96.2 | 96.9 | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  |
| GE 100001 | 1.4                         | 90.4 | 90.4 | 90.4 | 91.4 | 95.9 | 95.9 | 95.9 | 96.2 | 96.9 | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  |
| GE 100001 | 1.4                         | 90.4 | 90.4 | 90.4 | 91.4 | 95.9 | 95.9 | 95.9 | 96.2 | 96.9 | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  |
| GE 100001 | 1.4                         | 90.4 | 90.4 | 90.4 | 91.4 | 95.9 | 95.9 | 95.9 | 96.2 | 96.9 | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  |
| GE 100001 | 1.4                         | 90.4 | 90.4 | 90.4 | 91.4 | 95.9 | 95.9 | 95.9 | 96.2 | 96.9 | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  |
| GE 100001 | 1.4                         | 90.4 | 90.4 | 90.4 | 91.4 | 95.9 | 95.9 | 95.9 | 96.2 | 96.9 | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  |
| GE 100001 | 1.4                         | 90.4 | 90.4 | 90.4 | 91.4 | 95.9 | 95.9 | 95.9 | 96.2 | 96.9 | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  |
| GE 100001 | 1.4                         | 90.4 | 90.4 | 90.4 | 91.4 | 95.9 | 95.9 | 95.9 | 96.2 | 96.9 | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  |
| GE 100001 | 1.4                         | 90.4 | 90.4 | 90.4 | 91.4 | 95.9 | 95.9 | 95.9 | 96.2 | 96.9 | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  |
| GE 100001 | 1.4                         | 90.4 | 90.4 | 90.4 | 91.4 | 95.9 | 95.9 | 95.9 | 96.2 | 96.9 | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  |
| GE 100001 | 1.4                         | 90.4 | 90.4 | 90.4 | 91.4 | 95.9 | 95.9 | 95.9 | 96.2 | 96.9 | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  |
| GE 100001 | 1.4                         | 90.4 | 90.4 | 90.4 | 91.4 | 95.9 | 95.9 | 95.9 | 96.2 | 96.9 | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  |
| GE 100001 | 1.4                         | 90.4 | 90.4 | 90.4 | 91.4 | 95.9 | 95.9 | 95.9 | 96.2 | 96.9 | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  |
| GE 100001 | 1.4                         | 90.4 | 90.4 | 90.4 | 91.4 | 95.9 | 95.9 | 95.9 | 96.2 | 96.9 | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  |
| GE 100001 | 1.4                         | 90.4 | 90.4 | 90.4 | 91.4 | 95.9 | 95.9 | 95.9 | 96.2 | 96.9 | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  |
| GE 100001 | 1.4                         | 90.4 | 90.4 | 90.4 | 91.4 | 95.9 | 95.9 | 95.9 | 96.2 | 96.9 | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  |
| GE 100001 | 1.4                         | 90.4 | 90.4 | 90.4 | 91.4 | 95.9 | 95.9 | 95.9 | 96.2 | 96.9 | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  |
| GE 100001 | 1.4                         | 90.4 | 90.4 | 90.4 | 91.4 | 95.9 | 95.9 | 95.9 | 96.2 | 96.9 | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  |
| GE 100001 | 1.4                         | 90.4 | 90.4 | 90.4 | 91.4 | 95.9 | 95.9 | 95.9 | 96.2 | 96.9 | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  |
| GE 100001 | 1.4                         | 90.4 | 90.4 | 90.4 | 91.4 | 95.9 | 95.9 | 95.9 | 96.2 | 96.9 | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  |
| GE 100001 | 1.4                         | 90.4 | 90.4 | 90.4 | 91.4 | 95.9 | 95.9 | 95.9 | 96.2 | 96.9 | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  |
| GE 100001 | 1.4                         | 90.4 | 90.4 | 90.4 | 91.4 | 95.9 | 95.9 | 95.9 | 96.2 | 96.9 | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  |
| GE 100001 | 1.4                         | 90.4 | 90.4 | 90.4 | 91.4 | 95.9 | 95.9 | 95.9 | 96.2 | 96.9 | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  |
| GE 100001 | 1.4                         | 90.4 | 90.4 | 90.4 | 91.4 | 95.9 | 95.9 | 95.9 | 96.2 | 96.9 | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  |
| GE 100001 | 1.4                         | 90.4 | 90.4 | 90.4 | 91.4 | 95.9 | 95.9 | 95.9 | 96.2 | 96.9 | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  | 96.9  |
| GE 100001 | 1.4                         | 90.4 | 90.4 | 90.4 | 91.4 | 95.9 | 95   |      |      |      |       |       |       |       |       |       |

TOTAL NUMBER OF OBSERVATIONS: 292

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM FOURLY OBSERVATIONS

PERIOD OF RECORD: 79-87  
POLICE: SEE HOURS(EST): ALL

| CEILING    | VISIBILITY IN STATUTE MILES |      |      |      |       |       |       |      |       |      |       |      |       |      |       |      |
|------------|-----------------------------|------|------|------|-------|-------|-------|------|-------|------|-------|------|-------|------|-------|------|
|            | IN FEET                     | 1/2  | 3/4  | 1    | 1 1/4 | 1 1/2 | 1 3/4 | 2    | 2 1/2 | 3    | 3 1/2 | 4    | 4 1/2 | 5    | 5 1/2 | 6    |
| NO CEILING | 0.5                         | 33.7 | 33.7 | 33.7 | 32.3  | 33.9  | 33.9  | 34.2 | 34.5  | 34.6 | 34.9  | 34.9 | 34.9  | 35.1 | 35.1  | 35.4 |
| GE 20000   | 0.5                         | 33.7 | 33.7 | 33.7 | 34.3  | 36.0  | 36.0  | 36.3 | 36.6  | 36.7 | 36.9  | 37.0 | 37.0  | 37.2 | 37.2  | 37.5 |
| GE 18000   | 0.5                         | 33.7 | 33.7 | 33.7 | 34.3  | 36.0  | 36.0  | 36.3 | 36.6  | 36.7 | 36.9  | 37.0 | 37.0  | 37.2 | 37.2  | 37.5 |
| GE 16000   | 0.5                         | 33.7 | 33.7 | 33.7 | 34.3  | 36.0  | 36.0  | 36.3 | 36.6  | 36.7 | 36.9  | 37.0 | 37.0  | 37.2 | 37.2  | 37.5 |
| GE 14000   | 0.5                         | 33.7 | 33.7 | 33.7 | 34.3  | 36.0  | 36.0  | 36.3 | 36.6  | 36.7 | 36.9  | 37.0 | 37.0  | 37.2 | 37.2  | 37.5 |
| GE 12000   | 0.5                         | 33.7 | 33.7 | 33.7 | 34.3  | 36.0  | 36.0  | 36.3 | 36.6  | 36.7 | 36.9  | 37.0 | 37.0  | 37.2 | 37.2  | 37.5 |
| GE 10000   | 0.6                         | 50.4 | 50.4 | 50.4 | 51.3  | 54.1  | 54.1  | 54.6 | 55.2  | 55.3 | 55.6  | 55.7 | 55.8  | 56.0 | 56.0  | 56.4 |
| GE 9000    | 0.6                         | 50.4 | 50.4 | 50.4 | 51.3  | 54.1  | 54.1  | 54.6 | 55.2  | 55.3 | 55.6  | 55.7 | 55.8  | 56.0 | 56.0  | 56.4 |
| GE 8000    | 0.6                         | 50.4 | 50.4 | 50.4 | 51.3  | 54.1  | 54.1  | 54.6 | 55.2  | 55.3 | 55.6  | 55.7 | 55.8  | 56.0 | 56.0  | 56.4 |
| GE 7000    | 0.6                         | 50.4 | 50.4 | 50.4 | 51.3  | 54.2  | 54.2  | 54.7 | 55.3  | 55.4 | 55.7  | 55.8 | 55.9  | 56.0 | 56.1  | 56.6 |
| GE 6000    | 0.6                         | 51.3 | 51.3 | 51.3 | 52.7  | 54.9  | 55.0  | 55.4 | 56.0  | 56.2 | 56.4  | 56.5 | 56.6  | 56.8 | 56.8  | 57.3 |
| GE 5000    | 0.7                         | 55.0 | 55.0 | 55.2 | 56.1  | 59.1  | 59.2  | 59.8 | 60.3  | 60.5 | 60.7  | 60.7 | 60.9  | 61.1 | 61.2  | 61.6 |
| GE 4500    | 0.7                         | 56.4 | 56.5 | 56.5 | 57.5  | 60.6  | 60.6  | 61.2 | 61.8  | 61.9 | 62.2  | 62.2 | 62.4  | 62.6 | 62.6  | 63.1 |
| GE 4000    | 0.7                         | 61.7 | 61.6 | 61.6 | 62.6  | 65.9  | 66.0  | 66.6 | 67.2  | 67.4 | 67.6  | 67.7 | 67.6  | 68.0 | 68.0  | 68.5 |
| GE 3500    | 0.7                         | 62.7 | 62.8 | 62.8 | 63.9  | 67.2  | 67.2  | 67.9 | 68.5  | 68.7 | 68.9  | 69.0 | 69.1  | 69.3 | 69.3  | 69.8 |
| GE 3000    | 0.7                         | 64.6 | 64.6 | 64.6 | 66.1  | 69.5  | 69.5  | 70.3 | 70.9  | 71.1 | 71.4  | 71.5 | 71.5  | 71.7 | 71.8  | 72.2 |
| GE 2500    | 0.8                         | 69.1 | 69.2 | 69.2 | 70.5  | 74.2  | 74.3  | 75.1 | 75.7  | 75.9 | 76.2  | 76.2 | 76.3  | 76.5 | 76.5  | 77.0 |
| GE 2000    | 0.8                         | 72.5 | 72.6 | 72.6 | 73.9  | 77.2  | 77.2  | 78.1 | 78.7  | 79.0 | 79.8  | 80.1 | 80.2  | 80.4 | 80.4  | 80.9 |
| GE 1800    | 0.8                         | 73.4 | 73.5 | 73.5 | 75.2  | 79.4  | 79.5  | 80.3 | 80.9  | 81.2 | 81.4  | 81.5 | 81.6  | 81.8 | 81.8  | 82.3 |
| GE 1600    | 0.8                         | 76.2 | 76.3 | 76.3 | 77.7  | 82.0  | 82.1  | 83.0 | 83.7  | 83.9 | 84.1  | 84.2 | 84.3  | 84.5 | 84.5  | 85.0 |
| GE 1400    | 0.8                         | 76.2 | 76.3 | 76.3 | 77.7  | 82.0  | 82.1  | 83.0 | 83.7  | 83.9 | 84.1  | 84.2 | 84.3  | 84.5 | 84.5  | 85.0 |
| GE 1200    | 0.8                         | 76.2 | 76.3 | 76.3 | 77.7  | 82.0  | 82.1  | 83.0 | 83.7  | 83.9 | 84.1  | 84.2 | 84.3  | 84.5 | 84.5  | 85.0 |
| GE 1000    | 0.8                         | 76.2 | 76.3 | 76.3 | 77.7  | 82.0  | 82.1  | 83.0 | 83.7  | 83.9 | 84.1  | 84.2 | 84.3  | 84.5 | 84.5  | 85.0 |
| GE 900     | 0.8                         | 76.2 | 76.3 | 76.3 | 77.7  | 82.0  | 82.1  | 83.0 | 83.7  | 83.9 | 84.1  | 84.2 | 84.3  | 84.5 | 84.5  | 85.  |

TOTAL NUMBER OF OBSERVATIONS: 2342

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 270757 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 76-87  
MONTH: OCT HOURS: 0000-0200

| CEILING<br>IN<br>FEET | VISIBILITY IN STATUTE MILES |          |         |         |         |         |         |             |             |         |           |           |           |            |           |         |
|-----------------------|-----------------------------|----------|---------|---------|---------|---------|---------|-------------|-------------|---------|-----------|-----------|-----------|------------|-----------|---------|
|                       | GE<br>1                     | GE<br>10 | GE<br>6 | GE<br>5 | GE<br>4 | GE<br>3 | GE<br>2 | GE<br>1 1/2 | GE<br>1 1/4 | GE<br>1 | GE<br>3/4 | GE<br>5/8 | GE<br>1/2 | GE<br>5/16 | GE<br>1/4 | GE<br>0 |
| NO CEIL               |                             |          | 27.5    | 27.5    | 27.5    | 29.8    | 29.8    | 29.9        | 30.1        | 31.1    | 31.1      | 31.5      | 31.5      | 31.5       | 32.1      | 32.8    |
| GE 2000               |                             |          | 27.8    | 27.8    | 27.8    | 29.1    | 30.1    | 30.1        | 30.5        | 31.5    | 31.5      | 31.8      | 31.8      | 31.8       | 32.5      | 33.1    |
| GE 1800               |                             |          | 27.5    | 27.5    | 27.5    | 29.1    | 30.1    | 30.1        | 30.5        | 31.5    | 31.5      | 31.8      | 31.8      | 31.8       | 32.5      | 33.1    |
| GE 1600               |                             |          | 27.8    | 27.8    | 27.8    | 29.1    | 30.1    | 30.1        | 30.5        | 31.5    | 31.5      | 31.8      | 31.8      | 31.8       | 32.5      | 33.1    |
| GE 1400               |                             |          | 27.8    | 27.8    | 27.8    | 29.1    | 30.1    | 30.1        | 30.5        | 31.5    | 31.5      | 31.8      | 31.8      | 31.8       | 32.5      | 33.1    |
| GE 1200               |                             |          | 27.8    | 27.8    | 27.8    | 29.1    | 30.1    | 30.1        | 30.5        | 31.5    | 31.5      | 31.8      | 31.8      | 31.8       | 32.5      | 33.1    |
| GE 1000               |                             |          | 35.8    | 35.8    | 35.8    | 37.7    | 39.1    | 39.1        | 39.7        | 41.1    | 41.1      | 41.7      | 41.7      | 41.7       | 42.4      | 43.4    |
| GE 900                |                             |          | 35.8    | 35.8    | 35.8    | 37.7    | 39.1    | 39.1        | 39.7        | 41.1    | 41.1      | 41.7      | 41.7      | 41.7       | 42.4      | 43.4    |
| GE 800                |                             |          | 35.8    | 35.8    | 35.8    | 37.7    | 39.1    | 39.1        | 39.7        | 41.1    | 41.1      | 41.7      | 41.7      | 41.7       | 42.4      | 43.4    |
| GE 700                |                             |          | 36.1    | 36.1    | 36.1    | 38.1    | 39.4    | 39.4        | 40.1        | 41.4    | 41.4      | 42.1      | 42.1      | 42.1       | 42.7      | 43.7    |
| GE 600                |                             |          | 36.8    | 36.8    | 36.8    | 38.7    | 40.1    | 40.1        | 40.7        | 42.1    | 42.1      | 42.7      | 42.7      | 42.7       | 43.4      | 44.4    |
| GE 500                |                             |          | 41.4    | 41.4    | 41.4    | 43.4    | 44.7    | 44.7        | 45.4        | 46.7    | 46.7      | 47.4      | 47.4      | 47.4       | 48.0      | 49.0    |
| GE 450                |                             |          | 43.4    | 43.4    | 43.4    | 45.4    | 46.7    | 46.7        | 47.4        | 48.7    | 48.7      | 49.3      | 49.3      | 49.3       | 50.0      | 51.0    |
| GE 400                |                             |          | 46.7    | 46.7    | 46.7    | 48.7    | 50.3    | 50.3        | 51.0        | 52.3    | 52.3      | 53.0      | 53.0      | 53.0       | 53.6      | 54.6    |
| GE 350                |                             |          | 48.1    | 48.1    | 48.1    | 50.3    | 51.7    | 51.7        | 52.3        | 53.6    | 53.6      | 54.3      | 54.3      | 54.3       | 55.0      | 56.0    |
| GE 300                |                             |          | 50.3    | 50.3    | 50.3    | 52.3    | 54.3    | 54.3        | 55.0        | 56.3    | 56.3      | 57.0      | 57.0      | 57.0       | 57.6      | 58.6    |
| GE 250                |                             |          | 63.2    | 63.2    | 63.2    | 65.3    | 67.3    | 67.3        | 67.9        | 69.3    | 69.3      | 70.0      | 70.0      | 70.0       | 70.6      | 71.6    |
| GE 200                |                             |          | 63.2    | 63.2    | 63.2    | 65.3    | 67.3    | 67.3        | 67.9        | 69.3    | 69.3      | 70.0      | 70.0      | 70.0       | 70.6      | 71.6    |
| GE 180                |                             |          | 63.2    | 63.2    | 63.2    | 65.3    | 67.3    | 67.3        | 67.9        | 69.3    | 69.3      | 70.0      | 70.0      | 70.0       | 70.6      | 71.6    |
| GE 160                |                             |          | 63.2    | 63.2    | 63.2    | 65.3    | 67.3    | 67.3        | 67.9        | 69.3    | 69.3      | 70.0      | 70.0      | 70.0       | 70.6      | 71.6    |
| GE 140                |                             |          | 63.2    | 63.2    | 63.2    | 65.3    | 67.3    | 67.3        | 67.9        | 69.3    | 69.3      | 70.0      | 70.0      | 70.0       | 70.6      | 71.6    |
| GE 120                |                             |          | 63.2    | 63.2    | 63.2    | 65.3    | 67.3    | 67.3        | 67.9        | 69.3    | 69.3      | 70.0      | 70.0      | 70.0       | 70.6      | 71.6    |
| GE 100                |                             |          | 63.2    | 63.2    | 63.2    | 65.3    | 67.3    | 67.3        | 67.9        | 69.3    | 69.3      | 70.0      | 70.0      | 70.0       | 70.6      | 71.6    |
| GE 90                 |                             |          | 63.2    | 63.2    | 63.2    | 65.3    | 67.3    | 67.3        | 67.9        | 69.3    | 69.3      | 70.0      | 70.0      | 70.0       | 70.6      | 71.6    |
| GE 80                 |                             |          | 63.2    | 63.2    | 63.2    | 65.3    | 67.3    | 67.3        | 67.9        | 69.3    | 69.3      | 70.0      | 70.0      | 70.0       | 70.6      | 71.6    |
| GE 70                 |                             |          | 63.2    | 63.2    | 63.2    | 65.3    | 67.3    | 67.3        | 67.9        | 69.3    | 69.3      | 70.0      | 70.0      | 70.0       | 70.6      | 71.6    |
| GE 60                 |                             |          | 63.2    | 63.2    | 63.2    | 65.3    | 67.3    | 67.3        | 67.9        | 69.3    | 69.3      | 70.0      | 70.0      | 70.0       | 70.6      | 71.6    |
| GE 50                 |                             |          | 63.2    | 63.2    | 63.2    | 65.3    | 67.3    | 67.3        | 67.9        | 69.3    | 69.3      | 70.0      | 70.0      | 70.0       | 70.6      | 71.6    |
| GE 40                 |                             |          | 63.2    | 63.2    | 63.2    | 65.3    | 67.3    | 67.3        | 67.9        | 69.3    | 69.3      | 70.0      | 70.0      | 70.0       | 70.6      | 71.6    |
| GE 30                 |                             |          | 63.2    | 63.2    | 63.2    | 65.3    | 67.3    | 67.3        | 67.9        | 69.3    | 69.3      | 70.0      | 70.0      | 70.0       | 70.6      | 71.6    |
| GE 20                 |                             |          | 63.2    | 63.2    | 63.2    | 65.3    | 67.3    | 67.3        | 67.9        | 69.3    | 69.3      | 70.0      | 70.0      | 70.0       | 70.6      | 71.6    |
| GE 10                 |                             |          | 63.2    | 63.2    | 63.2    | 65.3    | 67.3    | 67.3        | 67.9        | 69.3    | 69.3      | 70.0      | 70.0      | 70.0       | 70.6      | 71.6    |
| GE 0                  |                             |          | 63.2    | 63.2    | 63.2    | 65.3    | 67.3    | 67.3        | 67.9        | 69.3    | 69.3      | 70.0      | 70.0      | 70.0       | 70.6      | 71.6    |

TOTAL NUMBER OF OBSERVATIONS: 732

GLOBAL CLIMATOLOGY BRANCH  
(SAFE)AC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM FOURLY OBSERVATIONS

STATION NUMBER: 275050 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 74-87  
MONTH: OCT HOURS(IST): 0300-0500

| CEILING<br>IN<br>FEET | VISIBILITY IN STATUTE MILES |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |
|-----------------------|-----------------------------|---------|---------|---------|---------|---------|---------|---------|---------|----------|----------|----------|----------|----------|----------|----------|
|                       | GE<br>1                     | GE<br>2 | GE<br>3 | GE<br>4 | GE<br>5 | GE<br>6 | GE<br>7 | GE<br>8 | GE<br>9 | GE<br>10 | GE<br>11 | GE<br>12 | GE<br>13 | GE<br>14 | GE<br>15 | GE<br>16 |
| NO CELL               | 1                           | 2       | 3       | 4       | 5       | 6       | 7       | 8       | 9       | 10       | 11       | 12       | 13       | 14       | 15       | 16       |
| GE 20000              | 1                           | 2       | 3       | 4       | 5       | 6       | 7       | 8       | 9       | 10       | 11       | 12       | 13       | 14       | 15       | 16       |
| GE 19000              | 1                           | 2       | 3       | 4       | 5       | 6       | 7       | 8       | 9       | 10       | 11       | 12       | 13       | 14       | 15       | 16       |
| GE 18000              | 1                           | 2       | 3       | 4       | 5       | 6       | 7       | 8       | 9       | 10       | 11       | 12       | 13       | 14       | 15       | 16       |
| GE 17000              | 1                           | 2       | 3       | 4       | 5       | 6       | 7       | 8       | 9       | 10       | 11       | 12       | 13       | 14       | 15       | 16       |
| GE 16000              | 1                           | 2       | 3       | 4       | 5       | 6       | 7       | 8       | 9       | 10       | 11       | 12       | 13       | 14       | 15       | 16       |
| GE 15000              | 1                           | 2       | 3       | 4       | 5       | 6       | 7       | 8       | 9       | 10       | 11       | 12       | 13       | 14       | 15       | 16       |
| GE 14000              | 1                           | 2       | 3       | 4       | 5       | 6       | 7       | 8       | 9       | 10       | 11       | 12       | 13       | 14       | 15       | 16       |
| GE 13000              | 1                           | 2       | 3       | 4       | 5       | 6       | 7       | 8       | 9       | 10       | 11       | 12       | 13       | 14       | 15       | 16       |
| GE 12000              | 1                           | 2       | 3       | 4       | 5       | 6       | 7       | 8       | 9       | 10       | 11       | 12       | 13       | 14       | 15       | 16       |
| GE 11000              | 1                           | 2       | 3       | 4       | 5       | 6       | 7       | 8       | 9       | 10       | 11       | 12       | 13       | 14       | 15       | 16       |
| GE 10000              | 1                           | 2       | 3       | 4       | 5       | 6       | 7       | 8       | 9       | 10       | 11       | 12       | 13       | 14       | 15       | 16       |
| GE 9000               | 1                           | 2       | 3       | 4       | 5       | 6       | 7       | 8       | 9       | 10       | 11       | 12       | 13       | 14       | 15       | 16       |
| GE 8000               | 1                           | 2       | 3       | 4       | 5       | 6       | 7       | 8       | 9       | 10       | 11       | 12       | 13       | 14       | 15       | 16       |
| GE 7000               | 1                           | 2       | 3       | 4       | 5       | 6       | 7       | 8       | 9       | 10       | 11       | 12       | 13       | 14       | 15       | 16       |
| GE 6000               | 1                           | 2       | 3       | 4       | 5       | 6       | 7       | 8       | 9       | 10       | 11       | 12       | 13       | 14       | 15       | 16       |
| GE 5000               | 1                           | 2       | 3       | 4       | 5       | 6       | 7       | 8       | 9       | 10       | 11       | 12       | 13       | 14       | 15       | 16       |
| GE 4000               | 1                           | 2       | 3       | 4       | 5       | 6       | 7       | 8       | 9       | 10       | 11       | 12       | 13       | 14       | 15       | 16       |
| GE 3000               | 1                           | 2       | 3       | 4       | 5       | 6       | 7       | 8       | 9       | 10       | 11       | 12       | 13       | 14       | 15       | 16       |
| GE 2000               | 1                           | 2       | 3       | 4       | 5       | 6       | 7       | 8       | 9       | 10       | 11       | 12       | 13       | 14       | 15       | 16       |
| GE 1000               | 1                           | 2       | 3       | 4       | 5       | 6       | 7       | 8       | 9       | 10       | 11       | 12       | 13       | 14       | 15       | 16       |
| GE 0                  | 1                           | 2       | 3       | 4       | 5       | 6       | 7       | 8       | 9       | 10       | 11       | 12       | 13       | 14       | 15       | 16       |

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM FOURLY OBSERVATIONS

STATION NUMBER: 275901 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: OCT HOURS(UST): 0600-0800

| CEILING<br>IN<br>FEET | VISIBILITY IN STATUTE MILES |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-----------------------|-----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|                       | 1                           | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   |
| NO CEIL               | 1                           | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   |
| GE 2000               | 18.5                        | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 |
| GE 1800               | 18.5                        | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 |
| GE 1600               | 18.5                        | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 |
| GE 1400               | 18.5                        | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 |
| GE 1200               | 18.5                        | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 |
| GE 1000               | 33.3                        | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 |
| GE 900                | 33.3                        | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 |
| GE 800                | 33.3                        | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 |
| GE 700                | 33.3                        | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 |
| GE 600                | 33.3                        | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 |
| GE 500                | 33.3                        | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 |
| GE 400                | 33.3                        | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 |
| GE 300                | 33.3                        | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 |
| GE 200                | 33.3                        | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 |
| GE 100                | 33.3                        | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 |
| GE 0                  | 33.3                        | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 | 33.3 |

TOTAL NUMBER OF OBSERVATIONS: 247

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

FILED IN OF RECORD: 76-87

MONTH: OCT HOURS (LST): 0900-1100

| CEILING  | VICINITY IN STATUTE MILES |     |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|----------|---------------------------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|          | 1                         | 2   | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   | 17   | 18   |
|          | FEET                      | 100 | 200  | 300  | 400  | 500  | 600  | 700  | 800  | 900  | 1000 | 1100 | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 |
| 60 FEET  | 1                         |     | 18.6 | 18.6 | 18.6 | 22.1 | 22.7 | 22.7 | 23.3 | 24.3 | 25.3 | 26.7 | 26.3 | 25.3 | 25.7 | 26.7 | 26.3 |      |
| 61 FEET  | 1                         |     | 20.1 | 20.1 | 20.1 | 21.4 | 24.0 | 24.0 | 24.3 | 26.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.3 | 27.3 | 28.0 |
| 62 FEET  | 1                         |     | 20.1 | 20.1 | 20.1 | 21.4 | 24.0 | 24.0 | 24.3 | 26.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.3 | 27.3 | 28.0 |
| 63 FEET  | 1                         |     | 20.1 | 20.1 | 20.1 | 21.4 | 24.0 | 24.0 | 24.3 | 26.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.3 | 27.3 | 28.0 |
| 64 FEET  | 1                         |     | 20.1 | 20.1 | 20.1 | 21.4 | 24.0 | 24.0 | 24.3 | 26.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.3 | 27.3 | 28.0 |
| 65 FEET  | 1                         |     | 20.1 | 20.1 | 20.1 | 21.4 | 24.0 | 24.0 | 24.3 | 26.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.3 | 27.3 | 28.0 |
| 66 FEET  | 1                         |     | 20.1 | 20.1 | 20.1 | 21.4 | 24.0 | 24.0 | 24.3 | 26.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.3 | 27.3 | 28.0 |
| 67 FEET  | 1                         |     | 20.1 | 20.1 | 20.1 | 21.4 | 24.0 | 24.0 | 24.3 | 26.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.3 | 27.3 | 28.0 |
| 68 FEET  | 1                         |     | 20.1 | 20.1 | 20.1 | 21.4 | 24.0 | 24.0 | 24.3 | 26.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.3 | 27.3 | 28.0 |
| 69 FEET  | 1                         |     | 20.1 | 20.1 | 20.1 | 21.4 | 24.0 | 24.0 | 24.3 | 26.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.3 | 27.3 | 28.0 |
| 70 FEET  | 1                         |     | 20.1 | 20.1 | 20.1 | 21.4 | 24.0 | 24.0 | 24.3 | 26.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.3 | 27.3 | 28.0 |
| 71 FEET  | 1                         |     | 20.1 | 20.1 | 20.1 | 21.4 | 24.0 | 24.0 | 24.3 | 26.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.3 | 27.3 | 28.0 |
| 72 FEET  | 1                         |     | 20.1 | 20.1 | 20.1 | 21.4 | 24.0 | 24.0 | 24.3 | 26.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.3 | 27.3 | 28.0 |
| 73 FEET  | 1                         |     | 20.1 | 20.1 | 20.1 | 21.4 | 24.0 | 24.0 | 24.3 | 26.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.3 | 27.3 | 28.0 |
| 74 FEET  | 1                         |     | 20.1 | 20.1 | 20.1 | 21.4 | 24.0 | 24.0 | 24.3 | 26.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.3 | 27.3 | 28.0 |
| 75 FEET  | 1                         |     | 20.1 | 20.1 | 20.1 | 21.4 | 24.0 | 24.0 | 24.3 | 26.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.3 | 27.3 | 28.0 |
| 76 FEET  | 1                         |     | 20.1 | 20.1 | 20.1 | 21.4 | 24.0 | 24.0 | 24.3 | 26.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.3 | 27.3 | 28.0 |
| 77 FEET  | 1                         |     | 20.1 | 20.1 | 20.1 | 21.4 | 24.0 | 24.0 | 24.3 | 26.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.3 | 27.3 | 28.0 |
| 78 FEET  | 1                         |     | 20.1 | 20.1 | 20.1 | 21.4 | 24.0 | 24.0 | 24.3 | 26.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.3 | 27.3 | 28.0 |
| 79 FEET  | 1                         |     | 20.1 | 20.1 | 20.1 | 21.4 | 24.0 | 24.0 | 24.3 | 26.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.3 | 27.3 | 28.0 |
| 80 FEET  | 1                         |     | 20.1 | 20.1 | 20.1 | 21.4 | 24.0 | 24.0 | 24.3 | 26.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.3 | 27.3 | 28.0 |
| 81 FEET  | 1                         |     | 20.1 | 20.1 | 20.1 | 21.4 | 24.0 | 24.0 | 24.3 | 26.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.3 | 27.3 | 28.0 |
| 82 FEET  | 1                         |     | 20.1 | 20.1 | 20.1 | 21.4 | 24.0 | 24.0 | 24.3 | 26.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.3 | 27.3 | 28.0 |
| 83 FEET  | 1                         |     | 20.1 | 20.1 | 20.1 | 21.4 | 24.0 | 24.0 | 24.3 | 26.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.3 | 27.3 | 28.0 |
| 84 FEET  | 1                         |     | 20.1 | 20.1 | 20.1 | 21.4 | 24.0 | 24.0 | 24.3 | 26.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.3 | 27.3 | 28.0 |
| 85 FEET  | 1                         |     | 20.1 | 20.1 | 20.1 | 21.4 | 24.0 | 24.0 | 24.3 | 26.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.3 | 27.3 | 28.0 |
| 86 FEET  | 1                         |     | 20.1 | 20.1 | 20.1 | 21.4 | 24.0 | 24.0 | 24.3 | 26.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.3 | 27.3 | 28.0 |
| 87 FEET  | 1                         |     | 20.1 | 20.1 | 20.1 | 21.4 | 24.0 | 24.0 | 24.3 | 26.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.3 | 27.3 | 28.0 |
| 88 FEET  | 1                         |     | 20.1 | 20.1 | 20.1 | 21.4 | 24.0 | 24.0 | 24.3 | 26.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.3 | 27.3 | 28.0 |
| 89 FEET  | 1                         |     | 20.1 | 20.1 | 20.1 | 21.4 | 24.0 | 24.0 | 24.3 | 26.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.3 | 27.3 | 28.0 |
| 90 FEET  | 1                         |     | 20.1 | 20.1 | 20.1 | 21.4 | 24.0 | 24.0 | 24.3 | 26.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.3 | 27.3 | 28.0 |
| 91 FEET  | 1                         |     | 20.1 | 20.1 | 20.1 | 21.4 | 24.0 | 24.0 | 24.3 | 26.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.3 | 27.3 | 28.0 |
| 92 FEET  | 1                         |     | 20.1 | 20.1 | 20.1 | 21.4 | 24.0 | 24.0 | 24.3 | 26.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.3 | 27.3 | 28.0 |
| 93 FEET  | 1                         |     | 20.1 | 20.1 | 20.1 | 21.4 | 24.0 | 24.0 | 24.3 | 26.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.3 | 27.3 | 28.0 |
| 94 FEET  | 1                         |     | 20.1 | 20.1 | 20.1 | 21.4 | 24.0 | 24.0 | 24.3 | 26.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.3 | 27.3 | 28.0 |
| 95 FEET  | 1                         |     | 20.1 | 20.1 | 20.1 | 21.4 | 24.0 | 24.0 | 24.3 | 26.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.3 | 27.3 | 28.0 |
| 96 FEET  | 1                         |     | 20.1 | 20.1 | 20.1 | 21.4 | 24.0 | 24.0 | 24.3 | 26.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.3 | 27.3 | 28.0 |
| 97 FEET  | 1                         |     | 20.1 | 20.1 | 20.1 | 21.4 | 24.0 | 24.0 | 24.3 | 26.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.3 | 27.3 | 28.0 |
| 98 FEET  | 1                         |     | 20.1 | 20.1 | 20.1 | 21.4 | 24.0 | 24.0 | 24.3 | 26.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.3 | 27.3 | 28.0 |
| 99 FEET  | 1                         |     | 20.1 | 20.1 | 20.1 | 21.4 | 24.0 | 24.0 | 24.3 | 26.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.3 | 27.3 | 28.0 |
| 100 FEET | 1                         |     | 20.1 | 20.1 | 20.1 | 21.4 | 24.0 | 24.0 | 24.3 | 26.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.0 | 27.3 | 27.3 | 28.0 |

TOTAL NUMBER OF OBSERVATIONS: 3.4

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VARIOUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275901 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 76-87  
MONTH: OCT HOURS(IST): 1200-1400

| CEILING<br>IN<br>FEET | VISIBILITY IN STATUTE MILES |      |      |      |       |      |       |      |       |      |       |      |       |      |       |      |
|-----------------------|-----------------------------|------|------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|------|
|                       | 1                           | GE   | GE   | GE   | GE    | GE   | GE    | GE   | GE    | GE   | GE    | GE   | GE    | GE   | GE    | GE   |
|                       | 1                           | 1/2  | 3/4  | 1    | 1 1/2 | 2    | 2 1/2 | 3    | 3 1/2 | 4    | 4 1/2 | 5    | 5 1/2 | 6    | 6 1/2 | 7    |
| NO CELL               | 1                           |      |      |      |       |      |       |      |       |      |       |      |       |      |       |      |
| GE 20000              |                             | 20.9 | 20.9 | 20.9 | 22.3  | 23.6 | 23.6  | 23.6 | 23.6  | 24.0 | 24.0  | 24.0 | 24.0  | 24.3 | 24.3  | 24.3 |
| GE 18000              |                             | 23.3 | 23.3 | 23.3 | 24.7  | 26.0 | 26.0  | 26.0 | 26.0  | 26.4 | 26.4  | 26.4 | 26.4  | 26.7 | 26.7  | 26.7 |
| GE 16000              |                             | 23.3 | 23.3 | 23.3 | 24.7  | 26.0 | 26.0  | 26.0 | 26.0  | 26.4 | 26.4  | 26.4 | 26.4  | 26.7 | 26.7  | 26.7 |
| GE 14000              |                             | 23.3 | 23.3 | 23.3 | 24.7  | 26.0 | 26.0  | 26.0 | 26.0  | 26.4 | 26.4  | 26.4 | 26.4  | 26.7 | 26.7  | 26.7 |
| GE 12000              |                             | 23.3 | 23.3 | 23.3 | 24.7  | 26.0 | 26.0  | 26.0 | 26.0  | 26.4 | 26.4  | 26.4 | 26.4  | 26.7 | 26.7  | 26.7 |
| GE 10000              |                             | 30.1 | 30.1 | 30.1 | 31.8  | 33.8 | 33.8  | 33.8 | 33.8  | 34.1 | 34.1  | 34.1 | 34.1  | 34.5 | 34.5  | 34.5 |
| GE 9000               |                             | 30.1 | 30.1 | 30.1 | 31.8  | 33.8 | 33.8  | 33.8 | 33.8  | 34.1 | 34.1  | 34.1 | 34.1  | 34.5 | 34.5  | 34.5 |
| GE 8000               |                             | 30.1 | 30.1 | 30.1 | 31.8  | 33.8 | 33.8  | 33.8 | 33.8  | 34.1 | 34.1  | 34.1 | 34.1  | 34.5 | 34.5  | 34.5 |
| GE 7000               |                             | 30.1 | 30.1 | 30.1 | 31.8  | 33.8 | 33.8  | 33.8 | 33.8  | 34.1 | 34.1  | 34.1 | 34.1  | 34.5 | 34.5  | 34.5 |
| GE 6000               |                             | 31.4 | 31.4 | 31.4 | 33.4  | 35.8 | 35.8  | 35.8 | 35.8  | 36.5 | 36.5  | 36.5 | 36.5  | 36.9 | 36.9  | 36.9 |
| GE 5000               |                             | 31.4 | 31.4 | 31.4 | 33.4  | 35.8 | 35.8  | 35.8 | 35.8  | 36.5 | 36.5  | 36.5 | 36.5  | 36.9 | 36.9  | 36.9 |
| GE 4000               |                             | 37.2 | 37.2 | 37.2 | 39.9  | 41.2 | 41.2  | 41.2 | 41.2  | 41.9 | 41.9  | 41.9 | 41.9  | 42.2 | 42.2  | 42.2 |
| GE 3000               |                             | 42.2 | 42.2 | 42.2 | 43.9  | 46.3 | 46.3  | 46.3 | 46.3  | 47.0 | 47.0  | 47.0 | 47.0  | 47.3 | 47.3  | 47.3 |
| GE 2000               |                             | 47.0 | 47.0 | 47.0 | 48.6  | 51.0 | 51.0  | 51.0 | 51.0  | 51.7 | 51.7  | 51.7 | 51.7  | 52.0 | 52.0  | 52.0 |
| GE 1800               |                             | 53.7 | 53.7 | 53.7 | 55.7  | 59.5 | 59.5  | 59.5 | 59.5  | 60.1 | 60.1  | 60.1 | 60.1  | 60.5 | 60.5  | 60.5 |
| GE 1600               |                             | 56.4 | 56.4 | 56.4 | 58.8  | 62.8 | 62.8  | 62.8 | 62.8  | 63.5 | 63.5  | 63.5 | 63.5  | 63.9 | 63.9  | 63.9 |
| GE 1400               |                             | 59.5 | 59.5 | 59.5 | 62.2  | 66.2 | 66.2  | 66.2 | 66.2  | 66.9 | 66.9  | 66.9 | 66.9  | 67.2 | 67.2  | 67.2 |
| GE 1200               |                             | 66.9 | 66.9 | 66.9 | 72.0  | 76.7 | 76.7  | 76.7 | 76.7  | 77.7 | 77.7  | 77.7 | 77.7  | 78.0 | 78.0  | 78.0 |
| GE 1000               |                             | 71.7 | 71.7 | 71.7 | 75.3  | 81.1 | 81.1  | 81.1 | 81.1  | 82.4 | 82.4  | 82.4 | 82.4  | 82.8 | 82.8  | 82.8 |
| GE 900                |                             | 72.3 | 72.3 | 72.3 | 75.7  | 81.8 | 81.8  | 81.8 | 81.8  | 83.1 | 83.1  | 83.1 | 83.1  | 83.4 | 83.4  | 83.4 |
| GE 800                |                             | 72.3 | 72.3 | 72.3 | 76.7  | 83.0 | 83.0  | 83.0 | 83.0  | 84.1 | 84.1  | 84.1 | 84.1  | 84.5 | 84.5  | 84.5 |
| GE 700                |                             | 72.3 | 72.3 | 72.3 | 76.7  | 84.5 | 84.5  | 84.5 | 84.5  | 85.1 | 85.1  | 85.1 | 85.1  | 85.5 | 85.5  | 85.5 |
| GE 600                |                             | 72.3 | 72.3 | 72.3 | 76.7  | 86.5 | 86.5  | 86.5 | 86.5  | 87.2 | 87.2  | 87.2 | 87.2  | 87.6 | 87.6  | 87.6 |
| GE 500                |                             | 72.3 | 72.3 | 72.3 | 76.7  | 86.5 | 86.5  | 86.5 | 86.5  | 87.2 | 87.2  | 87.2 | 87.2  | 87.6 | 87.6  | 87.6 |
| GE 400                |                             | 72.3 | 72.3 | 72.3 | 76.7  | 86.5 | 86.5  | 86.5 | 86.5  | 87.2 | 87.2  | 87.2 | 87.2  | 87.6 | 87.6  | 87.6 |
| GE 300                |                             | 72.3 | 72.3 | 72.3 | 76.7  | 86.5 | 86.5  | 86.5 | 86.5  | 87.2 | 87.2  | 87.2 | 87.2  | 87.6 | 87.6  | 87.6 |
| GE 200                |                             | 72.3 | 72.3 | 72.3 | 76.7  | 86.5 | 86.5  | 86.5 | 86.5  | 87.2 | 87.2  | 87.2 | 87.2  | 87.6 | 87.6  | 87.6 |
| GE 100                |                             | 72.3 | 72.3 | 72.3 | 76.7  | 86.5 | 86.5  | 86.5 | 86.5  | 87.2 | 87.2  | 87.2 | 87.2  | 87.6 | 87.6  | 87.6 |
| GE 0                  |                             | 72.3 | 72.3 | 72.3 | 76.7  | 86.5 | 86.5  | 86.5 | 86.5  | 87.2 | 87.2  | 87.2 | 87.2  | 87.6 | 87.6  | 87.6 |

TOTAL NUMBER OF OBSERVATIONS: 206

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM FOURLY OBSERVATIONS

STATION NUMBER: 27525 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: OCT HOURS (LST): 1500-1700

| CEILING    |   | VISIBILITY IN STATUTE MILES |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|------------|---|-----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| FEET       |   | GE                          | GE   | GE   | GE   | GE   | GE   | GE   | GE   | GE   | GE   | GE   | GE   | GE   | GE   | GE   | GE   |
|            |   | 1                           | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14   | 15   | 16   |
| NO CEILING | 1 | .3                          | 25.2 | 25.2 | 25.2 | 25.2 | 25.2 | 25.2 | 25.2 | 25.2 | 25.2 | 25.2 | 25.2 | 25.2 | 25.2 | 25.2 | 25.2 |
| GE 2000    | 1 | .3                          | 26.6 | 26.6 | 26.6 | 26.6 | 26.6 | 26.6 | 26.6 | 26.6 | 26.6 | 26.6 | 26.6 | 26.6 | 26.6 | 26.6 | 26.6 |
| GE 1800    | 1 | .3                          | 26.6 | 26.6 | 26.6 | 26.6 | 26.6 | 26.6 | 26.6 | 26.6 | 26.6 | 26.6 | 26.6 | 26.6 | 26.6 | 26.6 | 26.6 |
| GE 1600    | 1 | .3                          | 26.6 | 26.6 | 26.6 | 26.6 | 26.6 | 26.6 | 26.6 | 26.6 | 26.6 | 26.6 | 26.6 | 26.6 | 26.6 | 26.6 | 26.6 |
| GE 1400    | 1 | .3                          | 26.6 | 26.6 | 26.6 | 26.6 | 26.6 | 26.6 | 26.6 | 26.6 | 26.6 | 26.6 | 26.6 | 26.6 | 26.6 | 26.6 | 26.6 |
| GE 1200    | 1 | .3                          | 26.6 | 26.6 | 26.6 | 26.6 | 26.6 | 26.6 | 26.6 | 26.6 | 26.6 | 26.6 | 26.6 | 26.6 | 26.6 | 26.6 | 26.6 |
| GE 1000    | 1 | .3                          | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 |
| GE 900     | 1 | .3                          | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 |
| GE 800     | 1 | .3                          | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 |
| GE 700     | 1 | .3                          | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 |
| GE 600     | 1 | .3                          | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 | 33.1 |
| GE 500     | 1 | .3                          | 37.7 | 37.7 | 37.7 | 37.7 | 37.7 | 37.7 | 37.7 | 37.7 | 37.7 | 37.7 | 37.7 | 37.7 | 37.7 | 37.7 | 37.7 |
| GE 400     | 1 | .3                          | 37.7 | 37.7 | 37.7 | 37.7 | 37.7 | 37.7 | 37.7 | 37.7 | 37.7 | 37.7 | 37.7 | 37.7 | 37.7 | 37.7 | 37.7 |
| GE 300     | 1 | .3                          | 44.3 | 44.3 | 44.3 | 44.3 | 44.3 | 44.3 | 44.3 | 44.3 | 44.3 | 44.3 | 44.3 | 44.3 | 44.3 | 44.3 | 44.3 |
| GE 200     | 1 | .3                          | 44.3 | 44.3 | 44.3 | 44.3 | 44.3 | 44.3 | 44.3 | 44.3 | 44.3 | 44.3 | 44.3 | 44.3 | 44.3 | 44.3 | 44.3 |
| GE 100     | 1 | .3                          | 50.9 | 50.9 | 50.9 | 50.9 | 50.9 | 50.9 | 50.9 | 50.9 | 50.9 | 50.9 | 50.9 | 50.9 | 50.9 | 50.9 | 50.9 |
| GE 0       | 1 | .3                          | 50.9 | 50.9 | 50.9 | 50.9 | 50.9 | 50.9 | 50.9 | 50.9 | 50.9 | 50.9 | 50.9 | 50.9 | 50.9 | 50.9 | 50.9 |
| GE 2000    | 1 | .3                          | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 |
| GE 1800    | 1 | .3                          | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 |
| GE 1600    | 1 | .3                          | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 |
| GE 1400    | 1 | .3                          | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 |
| GE 1200    | 1 | .3                          | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 |
| GE 1000    | 1 | .3                          | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 |
| GE 900     | 1 | .3                          | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 |
| GE 800     | 1 | .3                          | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 |
| GE 700     | 1 | .3                          | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 |
| GE 600     | 1 | .3                          | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 |
| GE 500     | 1 | .3                          | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 |
| GE 400     | 1 | .3                          | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 |
| GE 300     | 1 | .3                          | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 |
| GE 200     | 1 | .3                          | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 |
| GE 100     | 1 | .3                          | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 |
| GE 0       | 1 | .3                          | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 |
| GE 2000    | 1 | .3                          | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 |
| GE 1800    | 1 | .3                          | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 |
| GE 1600    | 1 | .3                          | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 |
| GE 1400    | 1 | .3                          | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 |
| GE 1200    | 1 | .3                          | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 |
| GE 1000    | 1 | .3                          | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 |
| GE 900     | 1 | .3                          | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 |
| GE 800     | 1 | .3                          | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 |
| GE 700     | 1 | .3                          | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 |
| GE 600     | 1 | .3                          | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 |
| GE 500     | 1 | .3                          | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 |
| GE 400     | 1 | .3                          | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 |
| GE 300     | 1 | .3                          | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 |
| GE 200     | 1 | .3                          | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 |
| GE 100     | 1 | .3                          | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 |
| GE 0       | 1 | .3                          | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 | 56.4 |

TOTAL NUMBER OF OBSERVATIONS: 305

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275950 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: OCT HOURS(UT): 1800-2000

| CEILING<br>IN<br>FEET | VISIBILITY IN STATUTE MILES |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |
|-----------------------|-----------------------------|---------|---------|---------|---------|---------|---------|---------|---------|----------|----------|----------|----------|----------|----------|----------|
|                       | GE<br>1                     | GE<br>2 | GE<br>3 | GE<br>4 | GE<br>5 | GE<br>6 | GE<br>7 | GE<br>8 | GE<br>9 | GE<br>10 | GE<br>11 | GE<br>12 | GE<br>13 | GE<br>14 | GE<br>15 | GE<br>16 |
| NO CEIL               | .7                          | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     |
| GE 2000               | .3                          | 26.5    | 26.5    | 26.5    | 26.5    | 26.5    | 26.5    | 26.5    | 26.5    | 26.5     | 26.5     | 26.5     | 26.5     | 26.5     | 26.5     | 26.5     |
| GE 1600               | .3                          | 26.5    | 26.5    | 26.5    | 26.5    | 26.5    | 26.5    | 26.5    | 26.5    | 26.5     | 26.5     | 26.5     | 26.5     | 26.5     | 26.5     | 26.5     |
| GE 1400               | .3                          | 26.5    | 26.5    | 26.5    | 26.5    | 26.5    | 26.5    | 26.5    | 26.5    | 26.5     | 26.5     | 26.5     | 26.5     | 26.5     | 26.5     | 26.5     |
| GE 1200               | .3                          | 26.5    | 26.5    | 26.5    | 26.5    | 26.5    | 26.5    | 26.5    | 26.5    | 26.5     | 26.5     | 26.5     | 26.5     | 26.5     | 26.5     | 26.5     |
| GE 1000               | .7                          | 23.9    | 33.9    | 33.9    | 33.9    | 33.9    | 33.9    | 33.9    | 33.9    | 33.9     | 33.9     | 33.9     | 33.9     | 33.9     | 33.9     | 33.9     |
| GE 900                | .7                          | 33.9    | 33.9    | 33.9    | 33.9    | 33.9    | 33.9    | 33.9    | 33.9    | 33.9     | 33.9     | 33.9     | 33.9     | 33.9     | 33.9     | 33.9     |
| GE 800                | .3                          | 33.9    | 33.9    | 33.9    | 33.9    | 33.9    | 33.9    | 33.9    | 33.9    | 33.9     | 33.9     | 33.9     | 33.9     | 33.9     | 33.9     | 33.9     |
| GE 700                | .3                          | 33.9    | 33.9    | 33.9    | 33.9    | 33.9    | 33.9    | 33.9    | 33.9    | 33.9     | 33.9     | 33.9     | 33.9     | 33.9     | 33.9     | 33.9     |
| GE 600                | .3                          | 34.6    | 34.6    | 34.6    | 34.6    | 34.6    | 34.6    | 34.6    | 34.6    | 34.6     | 34.6     | 34.6     | 34.6     | 34.6     | 34.6     | 34.6     |
| GE 500                | .3                          | 39.6    | 39.6    | 39.6    | 39.6    | 39.6    | 39.6    | 39.6    | 39.6    | 39.6     | 39.6     | 39.6     | 39.6     | 39.6     | 39.6     | 39.6     |
| GE 400                | .3                          | 42.3    | 42.3    | 42.3    | 42.3    | 42.3    | 42.3    | 42.3    | 42.3    | 42.3     | 42.3     | 42.3     | 42.3     | 42.3     | 42.3     | 42.3     |
| GE 300                | .3                          | 42.3    | 42.3    | 42.3    | 42.3    | 42.3    | 42.3    | 42.3    | 42.3    | 42.3     | 42.3     | 42.3     | 42.3     | 42.3     | 42.3     | 42.3     |
| GE 200                | .7                          | 49.0    | 49.0    | 49.0    | 49.0    | 49.0    | 49.0    | 49.0    | 49.0    | 49.0     | 49.0     | 49.0     | 49.0     | 49.0     | 49.0     | 49.0     |
| GE 100                | .7                          | 54.4    | 54.4    | 54.4    | 54.4    | 54.4    | 54.4    | 54.4    | 54.4    | 54.4     | 54.4     | 54.4     | 54.4     | 54.4     | 54.4     | 54.4     |
| GE 2000               | .7                          | 58.1    | 58.1    | 58.1    | 58.1    | 58.1    | 58.1    | 58.1    | 58.1    | 58.1     | 58.1     | 58.1     | 58.1     | 58.1     | 58.1     | 58.1     |
| GE 1800               | .7                          | 62.4    | 62.4    | 62.4    | 62.4    | 62.4    | 62.4    | 62.4    | 62.4    | 62.4     | 62.4     | 62.4     | 62.4     | 62.4     | 62.4     | 62.4     |
| GE 1600               | .7                          | 65.8    | 65.8    | 65.8    | 65.8    | 65.8    | 65.8    | 65.8    | 65.8    | 65.8     | 65.8     | 65.8     | 65.8     | 65.8     | 65.8     | 65.8     |
| GE 1400               | .7                          | 67.5    | 67.5    | 67.5    | 67.5    | 67.5    | 67.5    | 67.5    | 67.5    | 67.5     | 67.5     | 67.5     | 67.5     | 67.5     | 67.5     | 67.5     |
| GE 1200               | .7                          | 67.5    | 67.5    | 67.5    | 67.5    | 67.5    | 67.5    | 67.5    | 67.5    | 67.5     | 67.5     | 67.5     | 67.5     | 67.5     | 67.5     | 67.5     |
| GE 1000               | .7                          | 71.6    | 71.6    | 71.6    | 71.6    | 71.6    | 71.6    | 71.6    | 71.6    | 71.6     | 71.6     | 71.6     | 71.6     | 71.6     | 71.6     | 71.6     |
| GE 900                | .7                          | 72.1    | 72.1    | 72.1    | 72.1    | 72.1    | 72.1    | 72.1    | 72.1    | 72.1     | 72.1     | 72.1     | 72.1     | 72.1     | 72.1     | 72.1     |
| GE 800                | .7                          | 72.1    | 72.1    | 72.1    | 72.1    | 72.1    | 72.1    | 72.1    | 72.1    | 72.1     | 72.1     | 72.1     | 72.1     | 72.1     | 72.1     | 72.1     |
| GE 700                | .7                          | 72.1    | 72.1    | 72.1    | 72.1    | 72.1    | 72.1    | 72.1    | 72.1    | 72.1     | 72.1     | 72.1     | 72.1     | 72.1     | 72.1     | 72.1     |
| GE 600                | .7                          | 72.1    | 72.1    | 72.1    | 72.1    | 72.1    | 72.1    | 72.1    | 72.1    | 72.1     | 72.1     | 72.1     | 72.1     | 72.1     | 72.1     | 72.1     |
| GE 500                | .7                          | 72.1    | 72.1    | 72.1    | 72.1    | 72.1    | 72.1    | 72.1    | 72.1    | 72.1     | 72.1     | 72.1     | 72.1     | 72.1     | 72.1     | 72.1     |
| GE 400                | .7                          | 72.1    | 72.1    | 72.1    | 72.1    | 72.1    | 72.1    | 72.1    | 72.1    | 72.1     | 72.1     | 72.1     | 72.1     | 72.1     | 72.1     | 72.1     |
| GE 300                | .7                          | 72.1    | 72.1    | 72.1    | 72.1    | 72.1    | 72.1    | 72.1    | 72.1    | 72.1     | 72.1     | 72.1     | 72.1     | 72.1     | 72.1     | 72.1     |
| GE 200                | .7                          | 72.1    | 72.1    | 72.1    | 72.1    | 72.1    | 72.1    | 72.1    | 72.1    | 72.1     | 72.1     | 72.1     | 72.1     | 72.1     | 72.1     | 72.1     |
| GE 100                | .7                          | 72.1    | 72.1    | 72.1    | 72.1    | 72.1    | 72.1    | 72.1    | 72.1    | 72.1     | 72.1     | 72.1     | 72.1     | 72.1     | 72.1     | 72.1     |
| GE 2000               | .7                          | 73.4    | 73.4    | 73.4    | 73.4    | 73.4    | 73.4    | 73.4    | 73.4    | 73.4     | 73.4     | 73.4     | 73.4     | 73.4     | 73.4     | 73.4     |

TOTAL NUMBER OF OBSERVATIONS: 248

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275450 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 79-87  
MONTH: OCT HOURS(LEST): 2100-2300

| CEILING<br>IN<br>FEET | 1 | VISIBILITY IN STATUTE MILES |      |      |      |      |      |      |          |          |      |        |        |        |         |        |       |
|-----------------------|---|-----------------------------|------|------|------|------|------|------|----------|----------|------|--------|--------|--------|---------|--------|-------|
|                       |   | GE 1                        | GE 2 | GE 3 | GE 4 | GE 5 | GE 6 | GE 2 | GE 1 1/2 | GE 1 1/4 | GE 1 | GE 3/4 | GE 5/8 | GE 1/2 | GE 5/16 | GE 1/4 | GE 0  |
| NO CEIL               | 1 | .0                          | 27.6 | 27.6 | 27.6 | 29.5 | 30.2 | 30.2 | 30.2     | 31.2     | 31.5 | 31.5   | 31.5   | 31.5   | 31.9    | 31.9   | 31.9  |
| GE 0000               | 1 | .7                          | 28.5 | 28.5 | 28.5 | 30.2 | 30.8 | 30.8 | 30.8     | 31.9     | 32.2 | 32.2   | 32.2   | 32.2   | 32.5    | 32.5   | 32.5  |
| GE 0000               | 1 | .3                          | 28.5 | 28.5 | 28.5 | 30.2 | 30.8 | 30.8 | 30.8     | 31.9     | 32.2 | 32.2   | 32.2   | 32.2   | 32.5    | 32.5   | 32.5  |
| GE 1000               | 1 | .3                          | 28.5 | 28.5 | 28.5 | 30.2 | 30.8 | 30.8 | 30.8     | 31.9     | 32.2 | 32.2   | 32.2   | 32.2   | 32.5    | 32.5   | 32.5  |
| GE 1400               | 1 | .3                          | 28.5 | 28.5 | 28.5 | 30.2 | 30.8 | 30.8 | 30.8     | 31.9     | 32.2 | 32.2   | 32.2   | 32.2   | 32.5    | 32.5   | 32.5  |
| GE 1200               | 1 | .7                          | 28.5 | 28.5 | 28.5 | 30.2 | 30.8 | 30.8 | 30.8     | 31.9     | 32.2 | 32.2   | 32.2   | 32.2   | 32.5    | 32.5   | 32.5  |
| GE 1000               | 1 | .7                          | 39.3 | 39.3 | 39.3 | 41.7 | 43.4 | 43.4 | 44.1     | 45.1     | 45.4 | 45.4   | 45.4   | 45.4   | 46.1    | 46.1   | 46.1  |
| GE 9000               | 1 | .3                          | 39.3 | 39.3 | 39.3 | 41.7 | 43.4 | 43.4 | 44.1     | 45.1     | 45.4 | 45.4   | 45.4   | 45.4   | 46.1    | 46.1   | 46.1  |
| GE 8000               | 1 | .7                          | 39.3 | 39.3 | 39.3 | 41.7 | 43.4 | 43.4 | 44.1     | 45.1     | 45.4 | 45.4   | 45.4   | 45.4   | 46.1    | 46.1   | 46.1  |
| GE 7000               | 1 | .3                          | 39.3 | 39.3 | 39.3 | 41.7 | 43.4 | 43.4 | 44.1     | 45.1     | 45.4 | 45.4   | 45.4   | 45.4   | 46.1    | 46.1   | 46.1  |
| GE 6000               | 1 | .7                          | 40.0 | 40.0 | 40.0 | 42.4 | 44.1 | 44.1 | 44.7     | 45.8     | 46.1 | 46.1   | 46.1   | 46.1   | 46.8    | 46.8   | 46.8  |
| GE 5000               | 1 | .3                          | 46.8 | 46.8 | 46.8 | 49.2 | 50.8 | 50.8 | 51.5     | 52.5     | 52.9 | 52.9   | 52.9   | 52.9   | 53.6    | 53.6   | 53.6  |
| GE 4000               | 1 | .7                          | 48.1 | 48.1 | 48.1 | 50.5 | 52.2 | 52.2 | 52.9     | 53.9     | 54.2 | 54.2   | 54.2   | 54.2   | 54.9    | 54.9   | 54.9  |
| GE 4000               | 1 | .7                          | 51.2 | 51.2 | 51.2 | 53.6 | 55.6 | 55.6 | 56.3     | 57.3     | 57.6 | 57.6   | 57.6   | 57.6   | 58.3    | 58.3   | 58.3  |
| GE 3500               | 1 | .3                          | 53.6 | 53.6 | 53.6 | 55.9 | 58.0 | 58.0 | 58.6     | 59.7     | 60.0 | 60.0   | 60.0   | 60.0   | 60.7    | 60.7   | 60.7  |
| GE 3000               | 1 | .7                          | 55.9 | 55.9 | 55.9 | 58.3 | 60.3 | 60.3 | 61.0     | 62.0     | 62.4 | 62.4   | 62.4   | 62.4   | 63.1    | 63.1   | 63.1  |
| GE 2500               | 1 | .3                          | 58.3 | 58.3 | 58.3 | 60.3 | 62.4 | 62.4 | 63.1     | 64.1     | 64.4 | 64.4   | 64.4   | 64.4   | 65.1    | 65.1   | 65.1  |
| GE 2000               | 1 | .7                          | 62.0 | 62.0 | 62.0 | 65.1 | 67.1 | 67.1 | 67.8     | 68.8     | 69.2 | 69.2   | 69.2   | 69.2   | 69.8    | 69.8   | 69.8  |
| GE 1800               | 1 | .7                          | 63.7 | 63.7 | 63.7 | 67.1 | 69.2 | 69.2 | 69.8     | 70.8     | 71.2 | 71.2   | 71.2   | 71.2   | 71.9    | 71.9   | 71.9  |
| GE 1500               | 1 | .7                          | 65.4 | 65.4 | 65.4 | 69.8 | 71.2 | 71.2 | 71.9     | 72.9     | 73.2 | 73.2   | 73.2   | 73.2   | 73.9    | 73.9   | 73.9  |
| GE 1200               | 1 | .3                          | 68.1 | 68.1 | 68.1 | 71.9 | 74.6 | 74.6 | 75.3     | 76.3     | 76.6 | 76.6   | 76.6   | 76.6   | 77.3    | 77.3   | 77.3  |
| GE 1000               | 1 | .7                          | 71.9 | 71.9 | 71.9 | 75.9 | 79.7 | 79.7 | 81.0     | 82.0     | 82.4 | 82.4   | 82.4   | 82.4   | 83.1    | 83.1   | 83.1  |
| GE 9000               | 1 | .7                          | 72.2 | 72.2 | 72.2 | 76.3 | 80.3 | 80.3 | 81.7     | 82.7     | 83.1 | 83.1   | 83.1   | 83.1   | 83.7    | 83.7   | 83.7  |
| GE 8000               | 1 | .7                          | 73.6 | 73.6 | 73.6 | 78.3 | 82.7 | 82.7 | 84.4     | 85.4     | 86.1 | 86.1   | 86.1   | 86.1   | 86.8    | 86.8   | 86.8  |
| GE 7000               | 1 | .7                          | 74.2 | 74.2 | 74.2 | 79.7 | 84.4 | 84.4 | 86.8     | 87.9     | 88.5 | 88.5   | 88.5   | 88.5   | 89.2    | 89.2   | 89.2  |
| GE 6000               | 1 | .7                          | 74.6 | 74.6 | 74.6 | 80.3 | 85.1 | 85.1 | 88.5     | 90.2     | 91.5 | 91.5   | 91.5   | 91.5   | 92.2    | 92.2   | 92.2  |
| GE 5000               | 1 | .7                          | 74.6 | 74.6 | 74.6 | 80.3 | 85.8 | 85.8 | 89.2     | 91.9     | 93.6 | 93.6   | 93.6   | 93.6   | 94.2    | 94.2   | 94.2  |
| GE 4000               | 1 | .7                          | 74.9 | 74.9 | 74.9 | 81.0 | 86.8 | 87.1 | 90.5     | 93.6     | 95.6 | 95.6   | 95.6   | 95.6   | 96.9    | 96.9   | 96.9  |
| GE 3000               | 1 | .7                          | 74.9 | 74.9 | 74.9 | 81.4 | 87.1 | 87.8 | 91.2     | 94.2     | 96.6 | 96.6   | 96.6   | 96.6   | 98.0    | 98.0   | 98.3  |
| GE 2000               | 1 | .7                          | 74.9 | 74.9 | 74.9 | 81.4 | 87.1 | 87.8 | 91.2     | 94.2     | 96.6 | 96.6   | 96.6   | 96.6   | 98.6    | 98.6   | 99.0  |
| GE 1000               | 1 | .7                          | 74.9 | 74.9 | 74.9 | 81.4 | 87.1 | 87.8 | 91.2     | 94.2     | 96.6 | 96.6   | 96.6   | 96.6   | 98.6    | 99.0   | 100.0 |
| GE 0000               | 1 | .7                          | 74.9 | 74.9 | 74.9 | 81.4 | 87.1 | 87.8 | 91.2     | 94.2     | 96.6 | 96.6   | 96.6   | 96.6   | 98.6    | 99.0   | 100.0 |

TOTAL NUMBER OF OBSERVATIONS: 245

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM FOURLY OBSERVATIONS

STATION NUMBER: 27957 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87

MONTH: OCT HOURS(IST): ALL

| CEILING |    | VISIBILITY IN STATUTE MILES |      |      |      |      |      |      |      |      |      |       |       |       |       |       |       |       |
|---------|----|-----------------------------|------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|
| IN FEET | 1  | CE 1                        | GE 1 | GE 2 | GE 3 | GE 4 | GE 5 | GE 6 | GE 7 | GE 8 | GE 9 | GE 10 | GE 11 | GE 12 | GE 13 | GE 14 | GE 15 | GE 16 |
| NO CEIL | 1  | .7                          | 23.4 | 23.4 | 23.4 | 24.6 | 26.2 | 26.3 | 26.5 | 27.2 | 27.4 | 27.6  | 27.7  | 27.8  | 28.1  | 28.1  | 28.6  |       |
| GE 2000 | .2 | 24.6                        | 24.6 | 24.6 | 25.8 | 27.4 | 27.5 | 27.7 | 28.5 | 28.7 | 28.9 | 29.1  | 29.3  | 29.3  | 29.3  | 29.8  |       |       |
| GE 1800 | .2 | 24.6                        | 24.6 | 24.6 | 25.8 | 27.4 | 27.5 | 27.7 | 28.5 | 28.7 | 28.9 | 29.1  | 29.3  | 29.3  | 29.3  | 29.8  |       |       |
| GE 1600 | .2 | 24.6                        | 24.6 | 24.6 | 25.8 | 27.4 | 27.5 | 27.7 | 28.5 | 28.7 | 28.9 | 29.1  | 29.3  | 29.3  | 29.3  | 29.8  |       |       |
| GE 1400 | .2 | 24.6                        | 24.6 | 24.6 | 25.8 | 27.4 | 27.5 | 27.7 | 28.5 | 28.7 | 28.9 | 29.1  | 29.3  | 29.3  | 29.3  | 29.8  |       |       |
| GE 1200 | .2 | 24.6                        | 24.6 | 24.6 | 25.8 | 27.4 | 27.5 | 27.7 | 28.5 | 28.7 | 28.9 | 29.1  | 29.3  | 29.3  | 29.3  | 29.8  |       |       |
| GE 1000 | .2 | 32.8                        | 32.8 | 32.8 | 34.8 | 37.1 | 37.1 | 37.7 | 38.6 | 38.9 | 39.1 | 39.3  | 39.4  | 39.7  | 39.7  | 40.2  |       |       |
| GE 900  | .2 | 32.8                        | 32.8 | 32.8 | 34.8 | 37.1 | 37.1 | 37.7 | 38.6 | 38.9 | 39.1 | 39.3  | 39.4  | 39.7  | 39.7  | 40.2  |       |       |
| GE 800  | .2 | 32.8                        | 32.8 | 32.8 | 34.8 | 37.1 | 37.1 | 37.7 | 38.6 | 38.9 | 39.1 | 39.3  | 39.4  | 39.7  | 39.7  | 40.2  |       |       |
| GE 700  | .2 | 32.8                        | 32.8 | 32.8 | 34.8 | 37.1 | 37.1 | 37.7 | 38.6 | 38.9 | 39.1 | 39.3  | 39.5  | 39.7  | 39.7  | 40.3  |       |       |
| GE 600  | .2 | 33.2                        | 33.2 | 33.2 | 35.2 | 37.5 | 37.6 | 38.1 | 39.0 | 39.3 | 39.7 | 39.7  | 39.8  | 40.1  | 40.1  | 40.6  |       |       |
| GE 500  | .7 | 36.8                        | 36.8 | 36.8 | 38.9 | 41.3 | 41.4 | 42.0 | 42.9 | 43.2 | 43.4 | 43.6  | 43.8  | 44.1  | 44.1  | 44.6  |       |       |
| GE 450  | .3 | 37.9                        | 37.9 | 37.9 | 40.1 | 42.4 | 42.5 | 43.1 | 44.1 | 44.4 | 44.6 | 44.9  | 45.0  | 45.3  | 45.3  | 45.8  |       |       |
| GE 400  | .3 | 41.4                        | 41.4 | 41.4 | 43.7 | 46.2 | 46.3 | 46.9 | 48.1 | 48.4 | 48.6 | 48.8  | 49.0  | 49.2  | 49.2  | 49.8  |       |       |
| GE 350  | .3 | 43.3                        | 43.3 | 43.3 | 45.6 | 48.1 | 48.2 | 48.8 | 49.9 | 50.3 | 50.5 | 50.7  | 50.9  | 51.1  | 51.1  | 51.7  |       |       |
| GE 300  | .7 | 46.4                        | 46.4 | 46.4 | 48.6 | 51.4 | 51.5 | 52.1 | 53.3 | 53.6 | 53.8 | 54.1  | 54.2  | 54.5  | 54.5  | 55.0  |       |       |
| GE 250  | .7 | 50.1                        | 50.1 | 50.1 | 52.4 | 55.3 | 55.4 | 56.1 | 57.3 | 57.6 | 57.9 | 58.1  | 58.2  | 58.5  | 58.5  | 59.0  |       |       |
| GE 200  | .3 | 55.1                        | 55.1 | 55.1 | 57.7 | 60.9 | 61.0 | 61.8 | 63.1 | 63.4 | 63.7 | 63.9  | 64.0  | 64.3  | 64.3  | 64.8  |       |       |
| GE 150  | .3 | 57.1                        | 57.1 | 57.1 | 59.6 | 63.4 | 63.4 | 64.2 | 65.5 | 65.8 | 66.1 | 66.3  | 66.4  | 66.7  | 66.7  | 67.2  |       |       |
| GE 110  | .3 | 60.2                        | 60.4 | 60.4 | 63.1 | 66.6 | 66.9 | 67.8 | 69.0 | 69.4 | 69.6 | 69.8  | 70.0  | 70.2  | 70.2  | 70.8  |       |       |
| GE 100  | .3 | 64.5                        | 64.7 | 64.7 | 67.6 | 72.4 | 72.5 | 73.5 | 75.0 | 75.4 | 75.7 | 75.9  | 76.0  | 76.3  | 76.3  | 76.9  |       |       |
| GE 90   | .3 | 67.1                        | 67.2 | 67.2 | 70.9 | 76.1 | 76.2 | 77.4 | 79.2 | 79.7 | 79.9 | 80.1  | 80.3  | 80.6  | 80.6  | 81.1  |       |       |
| GE 80   | .7 | 67.5                        | 67.7 | 67.7 | 71.3 | 77.0 | 77.2 | 78.4 | 80.7 | 80.7 | 80.9 | 81.1  | 81.3  | 81.6  | 81.6  | 82.1  |       |       |
| GE 70   | .7 | 68.2                        | 68.4 | 68.4 | 72.2 | 78.2 | 78.4 | 79.9 | 81.7 | 82.3 | 82.5 | 82.7  | 82.9  | 83.2  | 83.2  | 83.7  |       |       |
| GE 60   | .7 | 68.6                        | 68.8 | 68.8 | 72.9 | 79.4 | 79.6 | 81.4 | 83.3 | 84.0 | 84.2 | 84.5  | 84.7  | 85.0  | 85.0  | 85.5  |       |       |
| GE 50   | .3 | 69.3                        | 69.5 | 69.5 | 74.0 | 81.1 | 81.4 | 84.1 | 87.1 | 87.9 | 88.2 | 88.5  | 88.7  | 89.0  | 89.0  | 89.6  |       |       |
| GE 40   | .3 | 69.4                        | 69.5 | 69.5 | 74.3 | 81.8 | 82.1 | 84.9 | 88.4 | 89.4 | 89.8 | 90.1  | 90.3  | 90.7  | 90.7  | 91.2  |       |       |
| GE 30   | .7 | 69.6                        | 69.5 | 69.5 | 74.7 | 82.7 | 83.2 | 86.1 | 90.2 | 91.7 | 92.2 | 92.4  | 92.7  | 93.2  | 93.2  | 93.7  |       |       |
| GE 20   | .7 | 69.7                        | 69.5 | 69.5 | 74.9 | 83.0 | 83.5 | 86.6 | 91.0 | 93.0 | 93.7 | 94.4  | 94.7  | 95.5  | 95.5  | 96.4  |       |       |
| GE 10   | .3 | 69.7                        | 69.5 | 69.5 | 74.9 | 83.0 | 83.5 | 86.7 | 91.2 | 93.5 | 94.5 | 95.1  | 95.6  | 96.7  | 97.0  | 98.5  |       |       |
| GE 0    | .3 | 69.7                        | 69.5 | 69.5 | 74.9 | 83.0 | 83.5 | 86.7 | 91.2 | 93.5 | 94.4 | 95.2  | 95.7  | 97.0  | 97.4  | 100.0 |       |       |

TOTAL NUMBER OF OBSERVATIONS: 2799

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM FOURLY OBSERVATIONS

PERIOD OF RECORD: 77-84  
MONTH: NOV HOURS(LST): 0000-0200

| CEILING  |      | VISIBILITY IN STATUTE MILES |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
|----------|------|-----------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| IN       | FEET | GE 1/2                      | GE 3/8 | GE 1/4 | GE 3/8 | GE 1/2 | GE 3/8 | GE 1/4 | GE 3/8 | GE 1/2 | GE 3/8 | GE 1/4 | GE 3/8 | GE 1/2 | GE 3/8 | GE 1/4 |
| NO CEIL  | 1    | 13.2                        | 13.2   | 13.2   | 14.2   | 14.9   | 14.9   | 14.9   | 16.2   | 16.7   | 16.7   | 16.7   | 16.7   | 16.7   | 17.0   | 17.4   |
| GE 20000 |      | 14.2                        | 14.2   | 14.2   | 15.3   | 16.0   | 16.0   | 16.0   | 17.4   | 17.7   | 17.7   | 17.7   | 17.7   | 17.7   | 18.1   | 18.4   |
| GE 18000 |      | 14.2                        | 14.2   | 14.2   | 15.3   | 16.0   | 16.0   | 16.0   | 17.4   | 17.7   | 17.7   | 17.7   | 17.7   | 17.7   | 18.1   | 18.4   |
| GE 16000 |      | 14.2                        | 14.2   | 14.2   | 15.3   | 16.0   | 16.0   | 16.0   | 17.4   | 17.7   | 17.7   | 17.7   | 17.7   | 17.7   | 18.1   | 18.4   |
| GE 14000 |      | 14.2                        | 14.2   | 14.2   | 15.3   | 16.0   | 16.0   | 16.0   | 17.4   | 17.7   | 17.7   | 17.7   | 17.7   | 17.7   | 18.1   | 18.4   |
| GE 12000 |      | 14.2                        | 14.2   | 14.2   | 15.3   | 16.0   | 16.0   | 16.0   | 17.4   | 17.7   | 17.7   | 17.7   | 17.7   | 17.7   | 18.1   | 18.4   |
| GE 10000 |      | 19.4                        | 19.4   | 19.4   | 20.8   | 21.9   | 21.9   | 22.2   | 23.6   | 24.0   | 24.0   | 24.0   | 24.0   | 24.0   | 24.3   | 24.7   |
| GE 9000  |      | 19.4                        | 19.4   | 19.4   | 20.8   | 21.9   | 21.9   | 22.2   | 23.6   | 24.0   | 24.0   | 24.0   | 24.0   | 24.0   | 24.3   | 24.7   |
| GE 8000  |      | 19.4                        | 19.4   | 19.4   | 20.8   | 21.9   | 21.9   | 22.2   | 23.6   | 24.0   | 24.0   | 24.0   | 24.0   | 24.0   | 24.3   | 24.7   |
| GE 7000  |      | 19.4                        | 19.4   | 19.4   | 20.8   | 21.9   | 21.9   | 22.2   | 23.6   | 24.0   | 24.0   | 24.0   | 24.0   | 24.0   | 24.3   | 24.7   |
| GE 6000  |      | 19.4                        | 19.4   | 19.4   | 20.8   | 21.9   | 21.9   | 22.2   | 23.6   | 24.0   | 24.0   | 24.0   | 24.0   | 24.0   | 24.3   | 24.7   |
| GE 5000  |      | 21.2                        | 21.2   | 21.2   | 22.6   | 23.6   | 23.6   | 24.0   | 25.3   | 25.7   | 25.7   | 25.7   | 25.7   | 25.7   | 26.0   | 26.4   |
| GE 4000  |      | 21.2                        | 21.2   | 21.2   | 22.6   | 23.6   | 23.6   | 24.0   | 25.3   | 25.7   | 25.7   | 25.7   | 25.7   | 25.7   | 26.0   | 26.4   |
| GE 3000  |      | 21.2                        | 21.2   | 21.2   | 22.6   | 23.6   | 23.6   | 24.0   | 25.3   | 25.7   | 25.7   | 25.7   | 25.7   | 25.7   | 26.0   | 26.4   |
| GE 2000  |      | 21.2                        | 21.2   | 21.2   | 22.6   | 23.6   | 23.6   | 24.0   | 25.3   | 25.7   | 25.7   | 25.7   | 25.7   | 25.7   | 26.0   | 26.4   |
| GE 1000  |      | 21.2                        | 21.2   | 21.2   | 22.6   | 23.6   | 23.6   | 24.0   | 25.3   | 25.7   | 25.7   | 25.7   | 25.7   | 25.7   | 26.0   | 26.4   |
| GE 500   |      | 21.2                        | 21.2   | 21.2   | 22.6   | 23.6   | 23.6   | 24.0   | 25.3   | 25.7   | 25.7   | 25.7   | 25.7   | 25.7   | 26.0   | 26.4   |
| GE 200   |      | 21.2                        | 21.2   | 21.2   | 22.6   | 23.6   | 23.6   | 24.0   | 25.3   | 25.7   | 25.7   | 25.7   | 25.7   | 25.7   | 26.0   | 26.4   |
| GE 100   |      | 21.2                        | 21.2   | 21.2   | 22.6   | 23.6   | 23.6   | 24.0   | 25.3   | 25.7   | 25.7   | 25.7   | 25.7   | 25.7   | 26.0   | 26.4   |
| GE 50    |      | 21.2                        | 21.2   | 21.2   | 22.6   | 23.6   | 23.6   | 24.0   | 25.3   | 25.7   | 25.7   | 25.7   | 25.7   | 25.7   | 26.0   | 26.4   |
| GE 20    |      | 21.2                        | 21.2   | 21.2   | 22.6   | 23.6   | 23.6   | 24.0   | 25.3   | 25.7   | 25.7   | 25.7   | 25.7   | 25.7   | 26.0   | 26.4   |
| GE 10    |      | 21.2                        | 21.2   | 21.2   | 22.6   | 23.6   | 23.6   | 24.0   | 25.3   | 25.7   | 25.7   | 25.7   | 25.7   | 25.7   | 26.0   | 26.4   |
| GE 5     |      | 21.2                        | 21.2   | 21.2   | 22.6   | 23.6   | 23.6   | 24.0   | 25.3   | 25.7   | 25.7   | 25.7   | 25.7   | 25.7   | 26.0   | 26.4   |
| GE 2     |      | 21.2                        | 21.2   | 21.2   | 22.6   | 23.6   | 23.6   | 24.0   | 25.3   | 25.7   | 25.7   | 25.7   | 25.7   | 25.7   | 26.0   | 26.4   |
| GE 1     |      | 21.2                        | 21.2   | 21.2   | 22.6   | 23.6   | 23.6   | 24.0   | 25.3   | 25.7   | 25.7   | 25.7   | 25.7   | 25.7   | 26.0   | 26.4   |
| GE 0     |      | 21.2                        | 21.2   | 21.2   | 22.6   | 23.6   | 23.6   | 24.0   | 25.3   | 25.7   | 25.7   | 25.7   | 25.7   | 25.7   | 26.0   | 26.4   |
| GE 0     |      | 21.2                        | 21.2   | 21.2   | 22.6   | 23.6   | 23.6   | 24.0   | 25.3   | 25.7   | 25.7   | 25.7   | 25.7   | 25.7   | 26.0   | 26.4   |
| GE 0     |      | 21.2                        | 21.2   | 21.2   | 22.6   | 23.6   | 23.6   | 24.0   | 25.3   | 25.7   | 25.7   | 25.7   | 25.7   | 25.7   | 26.0   | 26.4   |
| GE 0     |      | 21.2                        | 21.2   | 21.2   | 22.6   | 23.6   | 23.6   | 24.0   | 25.3   | 25.7   | 25.7   | 25.7   | 25.7   | 25.7   | 26.0   | 26.4   |
| GE 0     |      | 21.2                        | 21.2   | 21.2   | 22.6   | 23.6   | 23.6   | 24.0   | 25.3   | 25.7   | 25.7   | 25.7   | 25.7   | 25.7   | 26.0   | 26.4   |
| GE 0     |      | 21.2                        | 21.2   | 21.2   | 22.6   | 23.6   | 23.6   | 24.0   | 25.3   | 25.7   | 25.7   | 25.7   | 25.7   | 25.7   | 26.0   | 26.4   |
| GE 0     |      | 21.2                        | 21.2   | 21.2   | 22.6   | 23.6   | 23.6   | 24.0   | 25.3   | 25.7   | 25.7   | 25.7   | 25.7   | 25.7   | 26.0   | 26.4   |
| GE 0     |      | 21.2                        | 21.2   | 21.2   | 22.6   | 23.6   | 23.6   | 24.0   | 25.3   | 25.7   | 25.7   | 25.7   | 25.7   | 25.7   | 26.0   | 26.4   |
| GE 0     |      | 21.2                        | 21.2   | 21.2   | 22.6   | 23.6   | 23.6   | 24.0   | 25.3   | 25.7   | 25.7   | 25.7   | 25.7   | 25.7   | 26.0   | 26.4   |
| GE 0     |      | 21.2                        | 21.2   | 21.2   | 22.6   | 23.6   | 23.6   | 24.0   | 25.3   | 25.7   | 25.7   | 25.7   | 25.7   | 25.7   | 26.0   | 26.4   |
| GE 0     |      | 21.2                        | 21.2   | 21.2   | 22.6   | 23.6   | 23.6   | 24.0   | 25.3   | 25.7   | 25.7   | 25.7   | 25.7   | 25.7   | 26.0   | 26.4   |
| GE 0     |      | 21.2                        | 21.2   | 21.2   | 22.6   | 23.6   | 23.6   | 24.0   | 25.3   | 25.7   | 25.7   | 25.7   | 25.7   | 25.7   | 26.0   | 26.4   |
| GE 0     |      | 21.2                        | 21.2   | 21.2   | 22.6   | 23.6   | 23.6   | 24.0   | 25.3   | 25.7   | 25.7   | 25.7   | 25.7   | 25.7   | 26.0   | 26.4   |
| GE 0     |      | 21.2                        | 21.2   | 21.2   | 22.6   | 23.6   | 23.6   | 24.0   | 25.3   | 25.7   | 25.7   | 25.7   | 25.7   | 25.7   | 26.0   | 26.4   |
| GE 0     |      | 21.2                        | 21.2   | 21.2   | 22.6   | 23.6   | 23.6   | 24.0   | 25.3   | 25.7   | 25.7   | 25.7   | 25.7   | 25.7   | 26.0   | 26.4   |
| GE 0     |      | 21.2                        | 21.2   | 21.2   | 22.6   | 23.6   | 23.6   | 24.0   | 25.3   | 25.7   | 25.7   | 25.7   | 25.7   | 25.7   | 26.0   | 26.4   |
| GE 0     |      | 21.2                        | 21.2   | 21.2   | 22.6   | 23.6   | 23.6   | 24.0   | 25.3   | 25.7   | 25.7   | 25.7   | 25.7   | 25.7   | 26.0   | 26.4   |
| GE 0     |      | 21.2                        | 21.2   | 21.2   | 22.6   | 23.6   | 23.6   | 24.0   | 25.3   | 25.7   | 25.7   | 25.7   | 25.7   | 25.7   | 26.0   | 26.4   |
| GE 0     |      | 21.2                        | 21.2   | 21.2   | 22.6   | 23.6   | 23.6   | 24.0   | 25.3   | 25.7   | 25.7   | 25.7   | 25.7   | 25.7   | 26.0   | 26.4   |
| GE 0     |      | 21.2                        | 21.2   | 21.2   | 22.6   | 23.6   | 23.6   | 24.0   | 25.3   | 25.7   | 25.7   | 25.7   | 25.7   | 25.7   | 26.0   | 26.4   |
| GE 0     |      | 21.2                        | 21.2   | 21.2   | 22.6   | 23.6   | 23.6   | 24.0   | 25.3   | 25.7   | 25.7   | 25.7   | 25.7   | 25.7   | 26.0   | 26.4   |
| GE 0     |      | 21.2                        | 21.2   | 21.2   | 22.6   | 23.6   | 23.6   | 24.0   | 25.3   | 25.7   | 25.7   | 25.7   | 25.7   | 25.7   | 26.0   | 26.4   |
| GE 0     |      | 21.2                        | 21.2   | 21.2   | 22.6   | 23.6   | 23.6   | 24.0   | 25.3   | 25.7   | 25.7   | 25.7   | 25.7   | 25.7   | 26.0   | 26.4   |
| GE 0     |      | 21.2                        | 21.2   | 21.2   | 22.6   | 23.6   | 23.6   | 24.0   | 25.3   | 25.7   | 25.7   | 25.7   | 25.7   | 25.7   | 26.0   | 26.4   |
| GE 0     |      | 21.2                        | 21.2   | 21.2   | 22.6   | 23.6   | 23.6   | 24.0   | 25.3   | 25.7   | 25.7   | 25.7   | 25.7   | 25.7   | 26.0   | 26.4   |
| GE 0     |      | 21.2                        | 21.2   | 21.2   | 22.6   | 23.6   | 23.6   | 24.0   | 25.3   | 25.7   | 25.7   | 25.7   | 25.7   | 25.7   | 26.0   | 26.4   |
| GE 0     |      | 21.2                        | 21.2   | 21.2   | 22.6   | 23.6   | 23.6   | 24.0   | 25.3   | 25.7   | 25.7   | 25.7   | 25.7   | 25.7   | 26.0   | 26.4   |
| GE 0     |      | 21.2                        | 21.2   | 21.2   | 22.6   | 23.6   | 23.6   | 24.0   | 25.3   | 25.7   |        |        |        |        |        |        |

TOTAL NUMBER OF OBSERVATIONS: 258

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

PERIOD OF RECORD: 77-86  
MONTH: NOV HOURS(LST): 0300-0500

TOTAL NUMBER OF OBSERVATIONS: 272

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275957 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 77-86  
MONTH: NOV HOURS(UT): 0600-0900

| CEILING<br>IN<br>FEET | VISIBILITY IN STATUTE MILES |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |
|-----------------------|-----------------------------|---------|---------|---------|---------|---------|---------|---------|---------|----------|----------|----------|----------|----------|----------|----------|
|                       | GE<br>1                     | GE<br>2 | GE<br>3 | GE<br>4 | GE<br>5 | GE<br>6 | GE<br>7 | GE<br>8 | GE<br>9 | GE<br>10 | GE<br>11 | GE<br>12 | GE<br>13 | GE<br>14 | GE<br>15 | GE<br>16 |
| NO CLD                |                             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |
| GE 2000               |                             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |
| GE 1800               |                             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |
| GE 1600               |                             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |
| GE 1400               |                             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |
| GE 1200               |                             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |
| GE 1000               |                             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |
| GE 900                |                             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |
| GE 800                |                             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |
| GE 700                |                             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |
| GE 600                |                             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |
| GE 500                |                             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |
| GE 400                |                             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |
| GE 300                |                             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |
| GE 200                |                             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |
| GE 100                |                             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |
| GE 0                  |                             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |

TOTAL NUMBER OF OBSERVATIONS: 256

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275950 STATION NAME: KAZAN U.S.S.R

PERIOD OF RECORD: 77-86  
MONTH: NOV HOURS(UT): 0900-1100

| CEILING<br>IN<br>FEET | GE<br>1 | GE<br>2 | GE<br>3 | GE<br>4 | GE<br>5 | GE<br>6 | GE<br>7 | GE<br>8 | GE<br>9 | GE<br>10 | GE<br>11 | GE<br>12 | GE<br>13 | GE<br>14 | GE<br>15 | GE<br>16 | GE<br>17 | GE<br>18 | GE<br>19 | GE<br>20 |
|-----------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
|                       |         |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |          |          |          |          |
| NO CEILING            | .4      | 10.0    | 10.0    | 10.0    | 10.0    | 10.0    | 10.0    | 10.0    | 10.0    | 10.0     | 10.0     | 10.0     | 10.0     | 10.0     | 10.0     | 10.0     | 10.0     | 10.0     | 10.0     | 10.0     |
| GE 20000              | .4      | 10.7    | 10.7    | 10.7    | 10.7    | 10.7    | 10.7    | 10.7    | 10.7    | 10.7     | 10.7     | 10.7     | 10.7     | 10.7     | 10.7     | 10.7     | 10.7     | 10.7     | 10.7     | 10.7     |
| GE 18000              | .4      | 10.7    | 10.7    | 10.7    | 10.7    | 10.7    | 10.7    | 10.7    | 10.7    | 10.7     | 10.7     | 10.7     | 10.7     | 10.7     | 10.7     | 10.7     | 10.7     | 10.7     | 10.7     | 10.7     |
| GE 16000              | .4      | 10.7    | 10.7    | 10.7    | 10.7    | 10.7    | 10.7    | 10.7    | 10.7    | 10.7     | 10.7     | 10.7     | 10.7     | 10.7     | 10.7     | 10.7     | 10.7     | 10.7     | 10.7     | 10.7     |
| GE 14000              | .4      | 10.7    | 10.7    | 10.7    | 10.7    | 10.7    | 10.7    | 10.7    | 10.7    | 10.7     | 10.7     | 10.7     | 10.7     | 10.7     | 10.7     | 10.7     | 10.7     | 10.7     | 10.7     | 10.7     |
| GE 12000              | .4      | 10.7    | 10.7    | 10.7    | 10.7    | 10.7    | 10.7    | 10.7    | 10.7    | 10.7     | 10.7     | 10.7     | 10.7     | 10.7     | 10.7     | 10.7     | 10.7     | 10.7     | 10.7     | 10.7     |
| GE 10000              | .4      | 17.6    | 17.6    | 17.6    | 17.6    | 17.6    | 17.6    | 17.6    | 17.6    | 17.6     | 17.6     | 17.6     | 17.6     | 17.6     | 17.6     | 17.6     | 17.6     | 17.6     | 17.6     | 17.6     |
| GE 9000               | .4      | 17.6    | 17.6    | 17.6    | 17.6    | 17.6    | 17.6    | 17.6    | 17.6    | 17.6     | 17.6     | 17.6     | 17.6     | 17.6     | 17.6     | 17.6     | 17.6     | 17.6     | 17.6     | 17.6     |
| GE 8000               | .4      | 17.6    | 17.6    | 17.6    | 17.6    | 17.6    | 17.6    | 17.6    | 17.6    | 17.6     | 17.6     | 17.6     | 17.6     | 17.6     | 17.6     | 17.6     | 17.6     | 17.6     | 17.6     | 17.6     |
| GE 7000               | .4      | 17.6    | 17.6    | 17.6    | 17.6    | 17.6    | 17.6    | 17.6    | 17.6    | 17.6     | 17.6     | 17.6     | 17.6     | 17.6     | 17.6     | 17.6     | 17.6     | 17.6     | 17.6     | 17.6     |
| GE 6000               | .4      | 17.6    | 17.6    | 17.6    | 17.6    | 17.6    | 17.6    | 17.6    | 17.6    | 17.6     | 17.6     | 17.6     | 17.6     | 17.6     | 17.6     | 17.6     | 17.6     | 17.6     | 17.6     | 17.6     |
| GE 5000               | .4      | 17.6    | 17.6    | 17.6    | 17.6    | 17.6    | 17.6    | 17.6    | 17.6    | 17.6     | 17.6     | 17.6     | 17.6     | 17.6     | 17.6     | 17.6     | 17.6     | 17.6     | 17.6     | 17.6     |
| GE 4500               | .4      | 20.6    | 20.6    | 20.6    | 20.6    | 20.6    | 20.6    | 20.6    | 20.6    | 20.6     | 20.6     | 20.6     | 20.6     | 20.6     | 20.6     | 20.6     | 20.6     | 20.6     | 20.6     | 20.6     |
| GE 4000               | .4      | 22.4    | 22.4    | 22.4    | 22.4    | 22.4    | 22.4    | 22.4    | 22.4    | 22.4     | 22.4     | 22.4     | 22.4     | 22.4     | 22.4     | 22.4     | 22.4     | 22.4     | 22.4     | 22.4     |
| GE 3500               | .4      | 22.4    | 22.4    | 22.4    | 22.4    | 22.4    | 22.4    | 22.4    | 22.4    | 22.4     | 22.4     | 22.4     | 22.4     | 22.4     | 22.4     | 22.4     | 22.4     | 22.4     | 22.4     | 22.4     |
| GE 3000               | .4      | 23.1    | 23.1    | 23.1    | 23.1    | 23.1    | 23.1    | 23.1    | 23.1    | 23.1     | 23.1     | 23.1     | 23.1     | 23.1     | 23.1     | 23.1     | 23.1     | 23.1     | 23.1     | 23.1     |
| GE 2500               | .4      | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     |
| GE 2000               | .4      | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     |
| GE 1800               | .4      | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     |
| GE 1600               | .4      | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     |
| GE 1400               | .4      | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     |
| GE 1200               | .4      | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     |
| GE 1000               | .4      | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     |
| GE 900                | .4      | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     |
| GE 800                | .4      | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     |
| GE 700                | .4      | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     |
| GE 600                | .4      | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     |
| GE 500                | .4      | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     |
| GE 400                | .4      | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     |
| GE 300                | .4      | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     |
| GE 200                | .4      | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     |
| GE 100                | .4      | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     |
| GE 0                  | .4      | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6    | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     | 24.6     |

TOTAL NUMBER OF OBSERVATIONS: 261

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 27595 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 77-86  
MONTH: NOV HOURS (LST): 1200-1400

| CEILING<br>IN<br>FEET | VISIBILITY IN STATUTE MILES |             |             |             |             |         |             |         |         |         |         |         |         |         |          |          |          |
|-----------------------|-----------------------------|-------------|-------------|-------------|-------------|---------|-------------|---------|---------|---------|---------|---------|---------|---------|----------|----------|----------|
|                       | GE<br>1                     | GE<br>1 1/8 | GE<br>1 1/4 | GE<br>1 1/2 | GE<br>1 3/4 | GE<br>2 | GE<br>2 1/2 | GE<br>3 | GE<br>4 | GE<br>5 | GE<br>6 | GE<br>7 | GE<br>8 | GE<br>9 | GE<br>10 | GE<br>11 | GE<br>12 |
| NO CEIL               | 1                           | 1           | 1           | 1           | 1           | 1       | 1           | 1       | 1       | 1       | 1       | 1       | 1       | 1       | 1        | 1        | 1        |
| GE 2000               | 1                           | 1           | 1           | 1           | 1           | 1       | 1           | 1       | 1       | 1       | 1       | 1       | 1       | 1       | 1        | 1        | 1        |
| GE 1800               | 1                           | 1           | 1           | 1           | 1           | 1       | 1           | 1       | 1       | 1       | 1       | 1       | 1       | 1       | 1        | 1        | 1        |
| GE 1600               | 1                           | 1           | 1           | 1           | 1           | 1       | 1           | 1       | 1       | 1       | 1       | 1       | 1       | 1       | 1        | 1        | 1        |
| GE 1400               | 1                           | 1           | 1           | 1           | 1           | 1       | 1           | 1       | 1       | 1       | 1       | 1       | 1       | 1       | 1        | 1        | 1        |
| GE 1200               | 1                           | 1           | 1           | 1           | 1           | 1       | 1           | 1       | 1       | 1       | 1       | 1       | 1       | 1       | 1        | 1        | 1        |
| GE 1000               | 1                           | 1           | 1           | 1           | 1           | 1       | 1           | 1       | 1       | 1       | 1       | 1       | 1       | 1       | 1        | 1        | 1        |
| GE 900                | 1                           | 1           | 1           | 1           | 1           | 1       | 1           | 1       | 1       | 1       | 1       | 1       | 1       | 1       | 1        | 1        | 1        |
| GE 800                | 1                           | 1           | 1           | 1           | 1           | 1       | 1           | 1       | 1       | 1       | 1       | 1       | 1       | 1       | 1        | 1        | 1        |
| GE 700                | 1                           | 1           | 1           | 1           | 1           | 1       | 1           | 1       | 1       | 1       | 1       | 1       | 1       | 1       | 1        | 1        | 1        |
| GE 600                | 1                           | 1           | 1           | 1           | 1           | 1       | 1           | 1       | 1       | 1       | 1       | 1       | 1       | 1       | 1        | 1        | 1        |
| GE 500                | 1                           | 1           | 1           | 1           | 1           | 1       | 1           | 1       | 1       | 1       | 1       | 1       | 1       | 1       | 1        | 1        | 1        |
| GE 400                | 1                           | 1           | 1           | 1           | 1           | 1       | 1           | 1       | 1       | 1       | 1       | 1       | 1       | 1       | 1        | 1        | 1        |
| GE 300                | 1                           | 1           | 1           | 1           | 1           | 1       | 1           | 1       | 1       | 1       | 1       | 1       | 1       | 1       | 1        | 1        | 1        |
| GE 200                | 1                           | 1           | 1           | 1           | 1           | 1       | 1           | 1       | 1       | 1       | 1       | 1       | 1       | 1       | 1        | 1        | 1        |
| GE 100                | 1                           | 1           | 1           | 1           | 1           | 1       | 1           | 1       | 1       | 1       | 1       | 1       | 1       | 1       | 1        | 1        | 1        |
| GE 50                 | 1                           | 1           | 1           | 1           | 1           | 1       | 1           | 1       | 1       | 1       | 1       | 1       | 1       | 1       | 1        | 1        | 1        |
| GE 0                  | 1                           | 1           | 1           | 1           | 1           | 1       | 1           | 1       | 1       | 1       | 1       | 1       | 1       | 1       | 1        | 1        | 1        |

TOTAL NUMBER OF OBSERVATIONS: 240

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/PAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM FOURLY OBSERVATIONS

STATION NUMBER: 27500 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 77-EE  
MONTH: NOV HOURS(IST): 1600-1700

| CEILING  |      | VISIBILITY IN STATUTE MILES |        |        |        |        |        |        |      |      |          |          |          |          |          |          |      |
|----------|------|-----------------------------|--------|--------|--------|--------|--------|--------|------|------|----------|----------|----------|----------|----------|----------|------|
| IN       | FEET | GE 1/8                      | GF 1/8 | GF 1/4 | GE 1/2 | GF 1/2 | GE 3/4 | GF 3/4 | GE 1 | GF 1 | GE 1 1/4 | GF 1 1/4 | GE 1 1/2 | GF 1 1/2 | GE 1 3/4 | GF 1 3/4 | GE 2 |
| NO CEIL  | 1    | 14.0                        | 14.0   | 14.0   | 15.0   | 15.6   | 15.6   | 15.6   | 15.6 | 16.0 | 16.0     | 16.0     | 16.0     | 16.0     | 16.0     | 16.0     | 16.0 |
| GE 20000 |      | 16.7                        | 16.7   | 16.7   | 17.0   | 17.7   | 17.7   | 17.7   | 17.7 | 18.0 | 18.0     | 18.0     | 18.0     | 18.0     | 18.0     | 18.0     | 18.0 |
| GE 18000 |      | 16.7                        | 16.7   | 16.7   | 17.0   | 17.7   | 17.7   | 17.7   | 17.7 | 18.0 | 18.0     | 18.0     | 18.0     | 18.0     | 18.0     | 18.0     | 18.0 |
| GE 16000 |      | 16.7                        | 16.7   | 16.7   | 17.0   | 17.7   | 17.7   | 17.7   | 17.7 | 18.0 | 18.0     | 18.0     | 18.0     | 18.0     | 18.0     | 18.0     | 18.0 |
| GE 14000 |      | 16.7                        | 16.7   | 16.7   | 17.0   | 17.7   | 17.7   | 17.7   | 17.7 | 18.0 | 18.0     | 18.0     | 18.0     | 18.0     | 18.0     | 18.0     | 18.0 |
| GE 12000 |      | 16.7                        | 16.7   | 16.7   | 17.0   | 17.7   | 17.7   | 17.7   | 17.7 | 18.0 | 18.0     | 18.0     | 18.0     | 18.0     | 18.0     | 18.0     | 18.0 |
| GE 10000 |      | 23.5                        | 23.5   | 23.5   | 24.8   | 26.2   | 26.2   | 26.2   | 26.2 | 26.5 | 26.5     | 26.5     | 26.5     | 26.5     | 26.5     | 26.5     | 26.5 |
| GE 9000  |      | 23.5                        | 23.5   | 23.5   | 24.8   | 26.2   | 26.2   | 26.2   | 26.2 | 26.5 | 26.5     | 26.5     | 26.5     | 26.5     | 26.5     | 26.5     | 26.5 |
| GE 8000  |      | 23.5                        | 23.5   | 23.5   | 24.8   | 26.2   | 26.2   | 26.2   | 26.2 | 26.5 | 26.5     | 26.5     | 26.5     | 26.5     | 26.5     | 26.5     | 26.5 |
| GE 7000  |      | 23.5                        | 23.5   | 23.5   | 24.8   | 26.2   | 26.2   | 26.2   | 26.2 | 26.5 | 26.5     | 26.5     | 26.5     | 26.5     | 26.5     | 26.5     | 26.5 |
| GE 6000  |      | 23.5                        | 23.5   | 23.5   | 25.2   | 26.5   | 26.5   | 26.5   | 26.5 | 26.9 | 26.9     | 26.9     | 26.9     | 26.9     | 26.9     | 26.9     | 26.9 |
| GE 5000  |      | 23.5                        | 23.5   | 23.5   | 25.5   | 26.9   | 26.9   | 26.9   | 26.9 | 27.2 | 27.2     | 27.2     | 27.2     | 27.2     | 27.2     | 27.2     | 27.2 |
| GE 4500  |      | 24.5                        | 24.5   | 24.5   | 26.2   | 27.6   | 27.6   | 27.6   | 27.6 | 27.9 | 27.9     | 27.9     | 27.9     | 27.9     | 27.9     | 27.9     | 27.9 |
| GE 4000  |      | 25.5                        | 25.5   | 25.5   | 27.2   | 28.6   | 28.6   | 28.6   | 28.6 | 28.9 | 28.9     | 28.9     | 28.9     | 28.9     | 28.9     | 28.9     | 28.9 |
| GE 3500  |      | 25.5                        | 25.5   | 25.5   | 27.6   | 28.9   | 28.9   | 28.9   | 28.9 | 29.3 | 29.3     | 29.3     | 29.3     | 29.3     | 29.3     | 29.3     | 29.3 |
| GE 3000  |      | 27.6                        | 27.6   | 27.6   | 29.3   | 30.6   | 30.6   | 30.6   | 30.6 | 31.3 | 31.3     | 31.3     | 31.3     | 31.3     | 31.3     | 31.3     | 31.3 |
| GE 2500  |      | 32.3                        | 32.3   | 32.3   | 34.4   | 36.7   | 36.7   | 36.7   | 36.7 | 37.4 | 37.4     | 37.4     | 37.4     | 37.4     | 37.4     | 37.4     | 37.4 |
| GE 2000  |      | 38.1                        | 38.1   | 38.1   | 40.1   | 43.2   | 43.2   | 43.2   | 43.2 | 44.2 | 44.2     | 44.2     | 44.2     | 44.2     | 44.2     | 44.2     | 44.2 |
| GE 1800  |      | 40.1                        | 40.1   | 40.1   | 42.2   | 45.6   | 45.6   | 45.6   | 45.6 | 46.9 | 46.9     | 46.9     | 46.9     | 46.9     | 46.9     | 46.9     | 46.9 |
| GE 1600  |      | 44.2                        | 44.2   | 44.2   | 46.2   | 49.7   | 49.7   | 49.7   | 49.7 | 50.3 | 50.3     | 50.3     | 50.3     | 50.3     | 50.3     | 50.3     | 50.3 |
| GE 1400  |      | 51.0                        | 51.0   | 51.0   | 53.7   | 58.2   | 58.2   | 58.2   | 58.2 | 60.9 | 60.9     | 60.9     | 60.9     | 60.9     | 60.9     | 60.9     | 60.9 |
| GE 1200  |      | 52.4                        | 52.4   | 52.4   | 55.1   | 60.9   | 60.9   | 60.9   | 60.9 | 64.3 | 64.3     | 64.3     | 64.3     | 64.3     | 64.3     | 64.3     | 64.3 |
| GE 1000  |      | 55.4                        | 55.4   | 55.4   | 59.5   | 65.3   | 65.3   | 65.3   | 65.3 | 68.7 | 68.7     | 68.7     | 68.7     | 68.7     | 68.7     | 68.7     | 68.7 |
| GE 900   |      | 57.5                        | 57.5   | 57.5   | 61.9   | 67.7   | 67.7   | 67.7   | 67.7 | 72.1 | 72.1     | 72.1     | 72.1     | 72.1     | 72.1     | 72.1     | 72.1 |
| GE 800   |      | 58.2                        | 58.2   | 58.2   | 63.6   | 70.7   | 70.7   | 70.7   | 70.7 | 75.2 | 75.2     | 75.2     | 75.2     | 75.2     | 75.2     | 75.2     | 75.2 |
| GE 700   |      | 59.9                        | 59.9   | 59.9   | 66.0   | 72.8   | 72.8   | 72.8   | 72.8 | 76.2 | 76.2     | 76.2     | 76.2     | 76.2     | 76.2     | 76.2     | 76.2 |
| GE 600   |      | 59.9                        | 59.9   | 59.9   | 66.3   | 72.8   | 72.8   | 72.8   | 72.8 | 76.2 | 76.2     | 76.2     | 76.2     | 76.2     | 76.2     | 76.2     | 76.2 |
| GE 500   |      | 59.9                        | 59.9   | 59.9   | 66.3   | 72.8   | 72.8   | 72.8   | 72.8 | 76.2 | 76.2     | 76.2     | 76.2     | 76.2     | 76.2     | 76.2     | 76.2 |
| GE 400   |      | 59.9                        | 59.9   | 59.9   | 66.3   | 72.8   | 72.8   | 72.8   | 72.8 | 76.2 | 76.2     | 76.2     | 76.2     | 76.2     | 76.2     | 76.2     | 76.2 |
| GE 300   |      | 59.9                        | 59.9   | 59.9   | 66.3   | 72.8   | 72.8   | 72.8   | 72.8 | 76.2 | 76.2     | 76.2     | 76.2     | 76.2     | 76.2     | 76.2     | 76.2 |
| GE 200   |      | 59.9                        | 59.9   | 59.9   | 66.3   | 72.8   | 72.8   | 72.8   | 72.8 | 76.2 | 76.2     | 76.2     | 76.2     | 76.2     | 76.2     | 76.2     | 76.2 |
| GE 100   |      | 59.9                        | 59.9   | 59.9   | 66.3   | 72.8   | 72.8   | 72.8   | 72.8 | 76.2 | 76.2     | 76.2     | 76.2     | 76.2     | 76.2     | 76.2     | 76.2 |
| GE       |      | 59.9                        | 59.9   | 59.9   | 66.3   | 72.8   | 72.8   | 72.8   | 72.8 | 76.2 | 76.2     | 76.2     | 76.2     | 76.2     | 76.2     | 76.2     | 76.2 |

TOTAL NUMBER OF OBSERVATIONS: 24

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 27595 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 77-84  
MONTH: NOV HOURS(IST): 1900-2000

| CEILING<br>IN<br>FEET | VISIBILITY IN STATUTE MILES |       |      |       |      |      |      |      |      |      |      |      |      |      |      |      |
|-----------------------|-----------------------------|-------|------|-------|------|------|------|------|------|------|------|------|------|------|------|------|
|                       | 1                           | 1 1/2 | 2    | 2 1/2 | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   | 11   | 12   | 13   | 14   |
| NO CEIL               | 1                           | 14.7  | 14.7 | 14.7  | 15.4 | 15.6 | 15.8 | 15.8 | 16.8 | 17.1 | 17.1 | 17.1 | 17.1 | 17.1 | 17.1 | 17.1 |
| GE 2000               |                             | 15.8  | 15.8 | 15.8  | 16.8 | 17.1 | 17.1 | 17.1 | 18.2 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 |
| GE 1800               |                             | 15.8  | 15.8 | 15.8  | 16.8 | 17.1 | 17.1 | 17.1 | 18.2 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 |
| GE 1600               |                             | 15.8  | 15.8 | 15.8  | 16.8 | 17.1 | 17.1 | 17.1 | 18.2 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 |
| GE 1400               |                             | 15.8  | 15.8 | 15.8  | 16.8 | 17.1 | 17.1 | 17.1 | 18.2 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 |
| GE 1200               |                             | 15.8  | 15.8 | 15.8  | 16.8 | 17.1 | 17.1 | 17.1 | 18.2 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 | 18.5 |
| GE 1000               |                             | 21.6  | 21.6 | 21.6  | 22.9 | 23.6 | 23.6 | 23.6 | 25.3 | 26.0 | 26.0 | 26.0 | 26.0 | 26.0 | 26.0 | 26.0 |
| GE 900                |                             | 21.6  | 21.6 | 21.6  | 22.9 | 23.6 | 23.6 | 23.6 | 25.3 | 26.0 | 26.0 | 26.0 | 26.0 | 26.0 | 26.0 | 26.0 |
| GE 800                |                             | 21.6  | 21.6 | 21.6  | 22.9 | 23.6 | 23.6 | 23.6 | 25.3 | 26.0 | 26.0 | 26.0 | 26.0 | 26.0 | 26.0 | 26.0 |
| GE 700                |                             | 21.6  | 21.6 | 21.6  | 22.9 | 23.6 | 23.6 | 23.6 | 25.3 | 26.0 | 26.0 | 26.0 | 26.0 | 26.0 | 26.0 | 26.0 |
| GE 600                |                             | 21.6  | 21.6 | 21.6  | 22.9 | 23.6 | 23.6 | 23.6 | 25.3 | 26.0 | 26.0 | 26.0 | 26.0 | 26.0 | 26.0 | 26.0 |
| GE 500                |                             | 22.3  | 22.3 | 22.3  | 23.6 | 24.3 | 24.7 | 24.7 | 26.4 | 27.1 | 27.1 | 27.1 | 27.1 | 27.1 | 27.1 | 27.1 |
| GE 400                |                             | 22.3  | 22.3 | 22.3  | 24.0 | 24.7 | 25.0 | 25.0 | 26.7 | 27.4 | 27.4 | 27.4 | 27.4 | 27.4 | 27.4 | 27.4 |
| GE 300                |                             | 24.3  | 24.3 | 24.3  | 26.4 | 27.1 | 27.4 | 27.4 | 29.1 | 29.8 | 29.8 | 29.8 | 29.8 | 29.8 | 29.8 | 29.8 |
| GE 200                |                             | 24.7  | 24.7 | 24.7  | 26.7 | 27.4 | 27.7 | 27.7 | 29.5 | 30.1 | 30.1 | 30.1 | 30.1 | 30.1 | 30.1 | 30.1 |
| GE 100                | .3                          | 25.1  | 25.1 | 25.1  | 31.2 | 31.6 | 32.2 | 32.2 | 33.9 | 34.6 | 34.6 | 34.6 | 34.6 | 34.6 | 34.6 | 34.6 |
| GE 500                | .7                          | 32.9  | 32.9 | 32.9  | 34.9 | 35.6 | 36.0 | 36.0 | 37.7 | 38.4 | 38.4 | 38.4 | 38.4 | 38.4 | 38.4 | 38.4 |
| GE 400                | .7                          | 36.0  | 36.0 | 36.0  | 39.0 | 40.1 | 40.4 | 40.4 | 42.1 | 42.8 | 42.8 | 42.8 | 42.8 | 42.8 | 42.8 | 42.8 |
| GE 300                | .7                          | 37.7  | 37.7 | 37.7  | 40.8 | 41.8 | 42.1 | 42.1 | 43.8 | 44.5 | 44.5 | 44.5 | 44.5 | 44.5 | 44.5 | 44.5 |
| GE 200                | .7                          | 40.8  | 40.8 | 40.8  | 44.5 | 45.5 | 45.9 | 45.9 | 48.6 | 49.3 | 49.3 | 49.3 | 49.3 | 49.3 | 49.3 | 49.3 |
| GE 100                | .7                          | 49.7  | 49.7 | 49.7  | 54.5 | 55.5 | 55.8 | 55.8 | 59.2 | 60.3 | 60.3 | 60.3 | 60.3 | 60.3 | 60.3 | 60.3 |
| GE 500                | .7                          | 52.4  | 52.4 | 52.4  | 57.2 | 58.6 | 59.0 | 59.0 | 63.3 | 63.7 | 63.7 | 63.7 | 63.7 | 63.7 | 63.7 | 63.7 |
| GE 400                | .7                          | 54.5  | 54.5 | 54.5  | 59.9 | 60.7 | 63.0 | 63.4 | 66.9 | 67.8 | 67.8 | 67.8 | 67.8 | 67.8 | 67.8 | 67.8 |
| GE 300                | .7                          | 55.8  | 55.8 | 55.8  | 60.0 | 60.1 | 65.4 | 65.8 | 69.9 | 70.9 | 70.9 | 70.9 | 70.9 | 70.9 | 70.9 | 70.9 |
| GE 200                | .7                          | 55.8  | 55.8 | 55.8  | 60.3 | 60.1 | 66.4 | 67.5 | 72.3 | 73.3 | 73.3 | 73.3 | 73.3 | 73.3 | 73.3 | 73.3 |
| GE 100                | .7                          | 57.9  | 57.9 | 57.9  | 65.1 | 69.5 | 70.2 | 72.3 | 79.1 | 80.5 | 80.5 | 80.5 | 80.5 | 80.5 | 80.5 | 80.5 |
| GE 500                | .7                          | 58.6  | 58.6 | 58.6  | 66.4 | 70.9 | 71.6 | 73.6 | 81.2 | 82.4 | 82.4 | 82.4 | 82.4 | 82.4 | 82.4 | 82.4 |
| GE 400                | .7                          | 59.9  | 59.9 | 59.9  | 68.5 | 73.6 | 74.3 | 77.7 | 86.0 | 87.0 | 87.0 | 87.0 | 87.0 | 87.0 | 87.0 | 87.0 |
| GE 300                | .7                          | 59.9  | 59.9 | 59.9  | 69.8 | 74.0 | 75.3 | 79.1 | 87.2 | 89.7 | 89.7 | 89.7 | 89.7 | 89.7 | 89.7 | 89.7 |
| GE 200                | .7                          | 59.9  | 59.9 | 59.9  | 69.8 | 74.0 | 75.7 | 79.5 | 87.7 | 90.4 | 90.4 | 90.4 | 90.4 | 90.4 | 90.4 | 90.4 |
| GE 100                | .7                          | 59.9  | 59.9 | 59.9  | 69.8 | 74.0 | 75.7 | 79.5 | 87.7 | 90.4 | 90.4 | 90.4 | 90.4 | 90.4 | 90.4 | 90.4 |
| GE                    | .7                          | 59.9  | 59.9 | 59.9  | 69.8 | 74.0 | 75.7 | 79.5 | 87.7 | 90.4 | 90.4 | 90.4 | 90.4 | 90.4 | 90.4 | 90.4 |

TOTAL NUMBER OF OBSERVATIONS: 292

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

Page 71 of 86 RECORD: 77-86

MONTH: NOV HOURS (LST): 2100-2300

| NO | CEILING |   |       |       |       |         |       |       | VISIBILITY IN STATUTE MILES |       |       |       |       |       |       |       |       |       |       |
|----|---------|---|-------|-------|-------|---------|-------|-------|-----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|    | IN FEET | 1 | 2     | 3     | 4     | 5       | 6     | 7     | 8                           | 9     | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    |
|    | 1       | 2 | 3     | 4     | 5     | 6       | 7     | 8     | 9                           | 10    | 11    | 12    | 13    | 14    | 15    | 16    | 17    | 18    | 19    |
| NO | CEIL    | 1 |       | 16.0  | 16.6  | 16.6    | 16.6  | 17.3  | 17.6                        | 17.6  | 18.0  | 19.7  | 20.0  | 20.0  | 20.0  | 20.0  | 20.0  | 20.0  | 20.0  |
| GE | 20.000  |   | 16.0  | 16.6  | 16.6  | 16.6    | 17.3  | 17.6  | 17.6                        | 18.0  | 19.7  | 20.0  | 20.0  | 20.0  | 20.0  | 20.0  | 20.0  | 20.0  | 20.0  |
| GE | 13.000  |   | 16.0  | 16.6  | 16.6  | 16.6    | 17.3  | 17.6  | 17.6                        | 18.0  | 19.7  | 20.0  | 20.0  | 20.0  | 20.0  | 20.0  | 20.0  | 20.0  | 20.0  |
| GE | 16.000  |   | 16.0  | 16.6  | 16.6  | 16.6    | 17.3  | 17.6  | 17.6                        | 18.0  | 19.7  | 20.0  | 20.0  | 20.0  | 20.0  | 20.0  | 20.0  | 20.0  | 20.0  |
| GE | 14.000  |   | 16.0  | 16.6  | 16.6  | 16.6    | 17.3  | 17.6  | 17.6                        | 18.0  | 19.7  | 20.0  | 20.0  | 20.0  | 20.0  | 20.0  | 20.0  | 20.0  | 20.0  |
| GE | 12.000  |   | 16.0  | 16.6  | 16.6  | 16.6    | 17.3  | 17.6  | 17.6                        | 18.0  | 19.7  | 20.0  | 20.0  | 20.0  | 20.0  | 20.0  | 20.0  | 20.0  | 20.0  |
| GE | 10.000  |   | 20.0  | 20.0  | 20.0  | 20.0    | 21.0  | 21.7  | 21.7                        | 22.0  | 23.7  | 24.4  | 24.4  | 24.7  | 24.7  | 24.7  | 24.7  | 24.7  | 24.7  |
| GE | 9.000   |   | 20.0  | 20.0  | 20.0  | 20.0    | 21.0  | 21.7  | 21.7                        | 22.0  | 23.7  | 24.4  | 24.4  | 24.7  | 24.7  | 24.7  | 24.7  | 24.7  | 24.7  |
| GE | 8.000   |   | 20.0  | 20.0  | 20.0  | 20.0    | 21.0  | 21.7  | 21.7                        | 22.0  | 23.7  | 24.4  | 24.4  | 24.7  | 24.7  | 24.7  | 24.7  | 24.7  | 24.7  |
| GE | 7.000   |   | 20.0  | 20.0  | 20.0  | 20.0    | 21.0  | 21.7  | 21.7                        | 22.0  | 23.7  | 24.4  | 24.4  | 24.7  | 24.7  | 24.7  | 24.7  | 24.7  | 24.7  |
| GE | 6.000   |   | 20.0  | 20.0  | 20.0  | 20.0    | 21.0  | 21.7  | 21.7                        | 22.0  | 23.7  | 24.4  | 24.4  | 24.7  | 24.7  | 24.7  | 24.7  | 24.7  | 24.7  |
| GE | 5.000   |   | 20.0  | 20.0  | 20.0  | 20.0    | 22.0  | 22.9  | 22.9                        | 23.7  | 25.4  | 26.4  | 26.4  | 26.4  | 26.4  | 26.4  | 26.4  | 26.4  | 26.4  |
| GE | 4.000   |   | 20.0  | 20.0  | 20.0  | 20.0    | 23.0  | 23.7  | 23.7                        | 24.4  | 26.4  | 27.1  | 27.1  | 27.5  | 27.5  | 27.5  | 27.5  | 27.5  | 27.5  |
| GE | 3.000   |   | 20.0  | 20.0  | 20.0  | 20.0    | 24.0  | 24.4  | 24.4                        | 25.4  | 27.1  | 27.1  | 27.1  | 27.5  | 27.5  | 27.5  | 27.5  | 27.5  | 27.5  |
| GE | 2.000   |   | 20.0  | 20.0  | 20.0  | 20.0    | 25.0  | 25.4  | 25.4                        | 26.4  | 27.1  | 27.1  | 27.1  | 27.5  | 27.5  | 27.5  | 27.5  | 27.5  | 27.5  |
| GE | 1.000   |   | 20.0  | 20.0  | 20.0  | 20.0    | 26.0  | 26.4  | 26.4                        | 27.1  | 27.1  | 27.1  | 27.1  | 27.5  | 27.5  | 27.5  | 27.5  | 27.5  | 27.5  |
| GE | 0.000   |   | 20.0  | 20.0  | 20.0  | 20.0    | 27.0  | 27.1  | 27.1                        | 27.1  | 27.1  | 27.1  | 27.1  | 27.5  | 27.5  | 27.5  | 27.5  | 27.5  | 27.5  |
| GE | 20.000  |   | 31.0  | 31.0  | 31.0  | 31.0    | 32.0  | 32.9  | 32.9                        | 33.6  | 35.3  | 36.3  | 36.3  | 36.6  | 36.6  | 36.6  | 36.6  | 36.6  | 36.6  |
| GE | 19.000  |   | 31.0  | 31.0  | 31.0  | 31.0    | 32.0  | 32.9  | 32.9                        | 33.6  | 35.3  | 36.3  | 36.3  | 36.6  | 36.6  | 36.6  | 36.6  | 36.6  | 36.6  |
| GE | 18.000  |   | 31.0  | 31.0  | 31.0  | 31.0    | 32.0  | 32.9  | 32.9                        | 33.6  | 35.3  | 36.3  | 36.3  | 36.6  | 36.6  | 36.6  | 36.6  | 36.6  | 36.6  |
| GE | 17.000  |   | 31.0  | 31.0  | 31.0  | 31.0    | 32.0  | 32.9  | 32.9                        | 33.6  | 35.3  | 36.3  | 36.3  | 36.6  | 36.6  | 36.6  | 36.6  | 36.6  | 36.6  |
| GE | 16.000  |   | 31.0  | 31.0  | 31.0  | 31.0    | 32.0  | 32.9  | 32.9                        | 33.6  | 35.3  | 36.3  | 36.3  | 36.6  | 36.6  | 36.6  | 36.6  | 36.6  | 36.6  |
| GE | 15.000  |   | 31.0  | 31.0  | 31.0  | 31.0    | 32.0  | 32.9  | 32.9                        | 33.6  | 35.3  | 36.3  | 36.3  | 36.6  | 36.6  | 36.6  | 36.6  | 36.6  | 36.6  |
| GE | 14.000  |   | 31.0  | 31.0  | 31.0  | 31.0    | 32.0  | 32.9  | 32.9                        | 33.6  | 35.3  | 36.3  | 36.3  | 36.6  | 36.6  | 36.6  | 36.6  | 36.6  | 36.6  |
| GE | 13.000  |   | 31.0  | 31.0  | 31.0  | 31.0    | 32.0  | 32.9  | 32.9                        | 33.6  | 35.3  | 36.3  | 36.3  | 36.6  | 36.6  | 36.6  | 36.6  | 36.6  | 36.6  |
| GE | 12.000  |   | 31.0  | 31.0  | 31.0  | 31.0    | 32.0  | 32.9  | 32.9                        | 33.6  | 35.3  | 36.3  | 36.3  | 36.6  | 36.6  | 36.6  | 36.6  | 36.6  | 36.6  |
| GE | 11.000  |   | 31.0  | 31.0  | 31.0  | 31.0    | 32.0  | 32.9  | 32.9                        | 33.6  | 35.3  | 36.3  | 36.3  | 36.6  | 36.6  | 36.6  | 36.6  | 36.6  | 36.6  |
| GE | 10.000  |   | 31.0  | 31.0  | 31.0  | 31.0    | 32.0  | 32.9  | 32.9                        | 33.6  | 35.3  | 36.3  | 36.3  | 36.6  | 36.6  | 36.6  | 36.6  | 36.6  | 36.6  |
| GE | 9.000   |   | 31.0  | 31.0  | 31.0  | 31.0    | 32.0  | 32.9  | 32.9                        | 33.6  | 35.3  | 36.3  | 36.3  | 36.6  | 36.6  | 36.6  | 36.6  | 36.6  | 36.6  |
| GE | 8.000   |   | 31.0  | 31.0  | 31.0  | 31.0    | 32.0  | 32.9  | 32.9                        | 33.6  | 35.3  | 36.3  | 36.3  | 36.6  | 36.6  | 36.6  | 36.6  | 36.6  | 36.6  |
| GE | 7.000   |   | 31.0  | 31.0  | 31.0  | 31.0    | 32.0  | 32.9  | 32.9                        | 33.6  | 35.3  | 36.3  | 36.3  | 36.6  | 36.6  | 36.6  | 36.6  | 36.6  | 36.6  |
| GE | 6.000   |   | 31.0  | 31.0  | 31.0  | 31.0    | 32.0  | 32.9  | 32.9                        | 33.6  | 35.3  | 36.3  | 36.3  | 36.6  | 36.6  | 36.6  | 36.6  | 36.6  | 36.6  |
| GE | 5.000   |   | 31.0  | 31.0  | 31.0  | 31.0    | 32.0  | 32.9  | 32.9                        | 33.6  | 35.3  | 36.3  | 36.3  | 36.6  | 36.6  | 36.6  | 36.6  | 36.6  | 36.6  |
| GE | 4.000   |   | 31.0  | 31.0  | 31.0  | 31.0    | 32.0  | 32.9  | 32.9                        | 33.6  | 35.3  | 36.3  | 36.3  | 36.6  | 36.6  | 36.6  | 36.6  | 36.6  | 36.6  |
| GE | 3.000   |   | 31.0  | 31.0  | 31.0  | 31.0    | 32.0  | 32.9  | 32.9                        | 33.6  | 35.3  | 36.3  | 36.3  | 36.6  | 36.6  | 36.6  | 36.6  | 36.6  | 36.6  |
| GE | 2.000   |   | 31.0  | 31.0  | 31.0  | 31.0    | 32.0  | 32.9  | 32.9                        | 33.6  | 35.3  | 36.3  | 36.3  | 36.6  | 36.6  | 36.6  | 36.6  | 36.6  | 36.6  |
| GE | 1.000   |   | 31.0  | 31.0  | 31.0  | 31.0    | 32.0  | 32.9  | 32.9                        | 33.6  | 35.3  | 36.3  | 36.3  | 36.6  | 36.6  | 36.6  | 36.6  | 36.6  | 36.6  |
| GE | 0.000   |   | 31.0  | 31.0  | 31.0  | 31.0    | 32.0  | 32.9  | 32.9                        | 33.6  | 35.3  | 36.3  | 36.3  | 36.6  | 36.6  | 36.6  | 36.6  | 36.6  | 36.6  |
| GE | 20.000  |   | 62.0  | 62.0  | 62.0  | 62.0    | 63.0  | 63.6  | 63.6                        | 64.3  | 66.0  | 67.0  | 67.0  | 67.3  | 67.3  | 67.3  | 67.3  | 67.3  | 67.3  |
| GE | 19.000  |   | 62.0  | 62.0  | 62.0  | 62.0    | 63.0  | 63.6  | 63.6                        | 64.3  | 66.0  | 67.0  | 67.0  | 67.3  | 67.3  | 67.3  | 67.3  | 67.3  | 67.3  |
| GE | 18.000  |   | 62.0  | 62.0  | 62.0  | 62.0    | 63.0  | 63.6  | 63.6                        | 64.3  | 66.0  | 67.0  | 67.0  | 67.3  | 67.3  | 67.3  | 67.3  | 67.3  | 67.3  |
| GE | 17.000  |   | 62.0  | 62.0  | 62.0  | 62.0    | 63.0  | 63.6  | 63.6                        | 64.3  | 66.0  | 67.0  | 67.0  | 67.3  | 67.3  | 67.3  | 67.3  | 67.3  | 67.3  |
| GE | 16.000  |   | 62.0  | 62.0  | 62.0  | 62.0    | 63.0  | 63.6  | 63.6                        | 64.3  | 66.0  | 67.0  | 67.0  | 67.3  | 67.3  | 67.3  | 67.3  | 67.3  | 67.3  |
| GE | 15.000  |   | 62.0  | 62.0  | 62.0  | 62.0    | 63.0  | 63.6  | 63.6                        | 64.3  | 66.0  | 67.0  | 67.0  | 67.3  | 67.3  | 67.3  | 67.3  | 67.3  | 67.3  |
| GE | 14.000  |   | 62.0  | 62.0  | 62.0  | 62.0    | 63.0  | 63.6  | 63.6                        | 64.3  | 66.0  | 67.0  | 67.0  | 67.3  | 67.3  | 67.3  | 67.3  | 67.3  | 67.3  |
| GE | 13.000  |   | 62.0  | 62.0  | 62.0  | 62.0    | 63.0  | 63.6  | 63.6                        | 64.3  | 66.0  | 67.0  | 67.0  | 67.3  | 67.3  | 67.3  | 67.3  | 67.3  | 67.3  |
| GE | 12.000  |   | 62.0  | 62.0  | 62.0  | 62.0    | 63.0  | 63.6  | 63.6                        | 64.3  | 66.0  | 67.0  | 67.0  | 67.3  | 67.3  | 67.3  | 67.3  | 67.3  | 67.3  |
| GE | 11.000  |   | 62.0  | 62.0  | 62.0  | 62.0    | 63.0  | 63.6  | 63.6                        | 64.3  | 66.0  | 67.0  | 67.0  | 67.3  | 67.3  | 67.3  | 67.3  | 67.3  | 67.3  |
| GE | 10.000  |   | 62.0  | 62.0  | 62.0  | 62.0    | 63.0  | 63.6  | 63.6                        | 64.3  | 66.0  | 67.0  | 67.0  | 67.3  | 67.3  | 67.3  | 67.3  | 67.3  | 67.3  |
| GE | 9.000   |   | 62.0  | 62.0  | 62.0  | 62.0    | 63.0  | 63.6  | 63.6                        | 64.3  | 66.0  | 67.0  | 67.0  | 67.3  | 67.3  | 67.3  | 67.3  | 67.3  | 67.3  |
| GE | 8.000   |   | 62.0  | 62.0  | 62.0  | 62.0    | 63.0  | 63.6  | 63.6                        | 64.3  | 66.0  | 67.0  | 67.0  | 67.3  | 67.3  | 67.3  | 67.3  | 67.3  | 67.3  |
| GE | 7.000   |   | 62.0  | 62.0  | 62.0  | 62.0    | 63.0  | 63.6  | 63.6                        | 64.3  | 66.0  | 67.0  | 67.0  | 67.3  | 67.3  | 67.3  | 67.3  | 67.3  | 67.3  |
| GE | 6.000   |   | 62.0  | 62.0  | 62.0  | 62.0    | 63.0  | 63.6  | 63.6                        | 64.3  | 66.0  | 67.0  | 67.0  | 67.3  | 67.3  | 67.3  | 67.3  | 67.3  | 67.3  |
| GE | 5.000   |   | 62.0  | 62.0  | 62.0  | 62.0    | 63.0  | 63.6  | 63.6                        | 64.3  | 66.0  | 67.0  | 67.0  | 67.3  | 67.3  | 67.3  | 67.3  | 67.3  | 67.3  |
| GE | 4.000   |   | 62.0  | 62.0  | 62.0  | 62.0    | 63.0  | 63.6  | 63.6                        | 64.3  | 66.0  | 67.0  | 67.0  | 67.3  | 67.3  | 67.3  | 67.3  | 67.3  | 67.3  |
| GE | 3.000   |   | 62.0  | 62.0  | 62.0  | 62.0    | 63.0  | 63.6  | 63.6                        | 64.3  | 66.0  | 67.0  | 67.0  | 67.3  | 67.3  | 67.3  | 67.3  | 67.3  | 67.3  |
| GE | 2.000   |   | 62.0  | 62.0  | 62.0  | 62.0    | 63.0  | 63.6  | 63.6                        | 64.3  | 66.0  | 67.0  | 67.0  | 67.3  | 67.3  | 67.3  | 67.3  | 67.3  | 67.3  |
| GE | 1.000   |   | 62.0  | 62.0  | 62.0  | 62.0    | 63.0  | 63.6  | 63.6                        | 64.3  | 66.0  | 67.0  | 67.0  | 67.3  | 67.3  | 67.3  | 67.3  | 67.3  | 67.3  |
| GE | 0.000   |   | 62.0  | 62.0  | 62.0  | 62.0    | 63.0  | 63.6  | 63.6                        | 64.3  | 66.0  | 67.0  | 67.0  | 67.3  | 67.3  | 67.3  | 67.3  | 67.3  | 67.3  |
| GE | 20.000  |   | 100.0 | 100.0 | 100.0 | 100.0   | 100.0 | 100.0 | 100.0                       | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| GE | 19.000  |   | 100.0 | 100.0 | 100.0 | 100.0   | 100.0 | 100.0 | 100.0                       | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| GE | 18.000  |   | 100.0 | 100.0 | 100.0 | 100.0   | 100.0 | 100.0 | 100.0                       | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| GE | 17.000  |   | 100.0 | 100.0 | 100.0 | 100.0   | 100.0 | 100.0 | 100.0                       | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| GE | 16.000  |   | 100.0 | 100.0 | 100.0 | 100.0   | 100.0 | 100.0 | 100.0                       | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| GE | 15.000  |   | 100.0 | 100.0 | 100.0 | 100.0   | 100.0 | 100.0 | 100.0                       | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| GE | 14.000  |   | 100.0 | 100.0 | 100.0 | 100.0   | 100.0 | 100.0 | 100.0                       | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| GE | 13.000  |   | 100.0 | 100.0 | 100.0 | 100.0   | 100.0 | 100.0 | 100.0                       | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| GE | 12.000  |   | 100.0 | 100.0 | 100.0 | 100.0</ |       |       |                             |       |       |       |       |       |       |       |       |       |       |

TOTAL NUMBER OF OBSERVATIONS: 240

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

PERIOD OF RECORD: 77-86  
MONTH: NOV HOURS (LST): ALL

| CEILING  |   | VISIBILITY IN STATUTE MILES |        |        |        |      |          |          |          |          |      |          |      |          |      |          |       |  |
|----------|---|-----------------------------|--------|--------|--------|------|----------|----------|----------|----------|------|----------|------|----------|------|----------|-------|--|
| IN FEET  | 1 | GE 1/2                      | GE 5/8 | GE 3/4 | GE 7/8 | GE 1 | GE 1 1/2 | GE 1 1/4 | GE 1 1/2 | GE 1 3/4 | GE 2 | GE 2 1/2 | GE 3 | GE 3 1/2 | GE 4 | GE 4 1/2 | GE 5  |  |
| NO CEIL  | 1 | 1.1                         | 13.2   | 13.2   | 13.2   | 13.6 | 14.1     | 14.1     | 14.2     | 15.2     | 15.5 | 15.5     | 15.5 | 15.5     | 15.7 | 15.9     |       |  |
| GE 20000 | 1 | 14.1                        | 14.1   | 14.1   | 14.6   | 15.1 | 15.1     | 15.4     | 16.4     | 16.6     | 16.6 | 16.6     | 16.6 | 16.6     | 16.7 | 16.9     | 17.1  |  |
| GE 18000 | 1 | 14.1                        | 14.1   | 14.1   | 14.6   | 15.1 | 15.1     | 15.4     | 16.4     | 16.6     | 16.6 | 16.6     | 16.6 | 16.6     | 16.7 | 16.9     | 17.1  |  |
| GE 16000 | 1 | 14.1                        | 14.1   | 14.1   | 14.6   | 15.1 | 15.1     | 15.4     | 16.4     | 16.6     | 16.6 | 16.6     | 16.6 | 16.6     | 16.7 | 16.9     | 17.1  |  |
| GE 14000 | 1 | 14.1                        | 14.1   | 14.1   | 14.6   | 15.1 | 15.1     | 15.4     | 16.4     | 16.6     | 16.6 | 16.6     | 16.6 | 16.6     | 16.7 | 16.9     | 17.1  |  |
| GE 12000 | 1 | 14.1                        | 14.1   | 14.1   | 14.6   | 15.1 | 15.1     | 15.4     | 16.4     | 16.6     | 16.6 | 16.6     | 16.6 | 16.6     | 16.7 | 16.9     | 17.1  |  |
| GE 10000 | 1 | 20.2                        | 20.2   | 20.2   | 21.3   | 22.3 | 22.3     | 22.7     | 24.1     | 24.6     | 24.7 | 24.8     | 24.8 | 24.8     | 24.9 | 25.0     | 25.3  |  |
| GE 9000  | 1 | 20.2                        | 20.2   | 20.2   | 21.3   | 22.3 | 22.3     | 22.7     | 24.1     | 24.6     | 24.7 | 24.8     | 24.8 | 24.8     | 24.9 | 25.0     | 25.3  |  |
| GE 8000  | 1 | 20.2                        | 20.2   | 20.2   | 21.3   | 22.3 | 22.3     | 22.7     | 24.1     | 24.6     | 24.7 | 24.8     | 24.8 | 24.8     | 24.9 | 25.0     | 25.3  |  |
| GE 7000  | 1 | 20.2                        | 20.2   | 20.2   | 21.3   | 22.3 | 22.3     | 22.7     | 24.1     | 24.6     | 24.7 | 24.8     | 24.8 | 24.8     | 24.9 | 25.0     | 25.3  |  |
| GE 6000  | 1 | 20.2                        | 20.2   | 20.2   | 21.4   | 22.4 | 22.4     | 22.9     | 24.3     | 24.8     | 24.9 | 24.9     | 24.9 | 25.1     | 25.2 | 25.4     |       |  |
| GE 5000  | 1 | 21.3                        | 21.3   | 21.3   | 22.4   | 23.5 | 23.5     | 24.0     | 25.4     | 25.9     | 26.1 | 26.2     | 26.2 | 26.2     | 26.3 | 26.6     |       |  |
| GE 4000  | 1 | 21.9                        | 21.9   | 21.9   | 23.0   | 24.0 | 24.1     | 24.6     | 26.0     | 26.5     | 26.6 | 26.6     | 26.6 | 26.7     | 26.9 | 27.1     |       |  |
| GE 3000  | 1 | 23.0                        | 23.0   | 23.0   | 24.2   | 25.3 | 25.3     | 25.8     | 27.3     | 27.8     | 27.9 | 27.9     | 27.9 | 28.1     | 28.2 | 28.5     |       |  |
| GE 2000  | 1 | 23.6                        | 23.6   | 23.6   | 24.8   | 25.9 | 25.9     | 26.4     | 27.9     | 28.5     | 28.6 | 28.6     | 28.6 | 28.8     | 28.9 | 29.2     |       |  |
| GE 1000  | 2 | 25.0                        | 25.0   | 25.0   | 27.3   | 28.3 | 28.4     | 28.9     | 30.5     | 31.1     | 31.1 | 31.2     | 31.2 | 31.3     | 31.5 | 31.8     |       |  |
| GE 25000 | 2 | 28.7                        | 28.7   | 28.7   | 30.4   | 31.7 | 31.7     | 32.4     | 34.0     | 34.7     | 34.7 | 34.8     | 34.8 | 34.8     | 34.9 | 35.1     | 35.4  |  |
| GE 20000 | 2 | 31.1                        | 31.1   | 31.1   | 33.3   | 34.4 | 34.4     | 35.0     | 37.0     | 37.8     | 37.8 | 37.9     | 37.9 | 37.9     | 38.1 | 38.3     | 38.6  |  |
| GE 15000 | 2 | 35.2                        | 35.2   | 35.2   | 37.3   | 38.4 | 38.4     | 39.1     | 39.6     | 41.5     | 42.2 | 42.3     | 42.4 | 42.4     | 42.5 | 42.6     | 42.9  |  |
| GE 10000 | 2 | 39.2                        | 39.2   | 39.2   | 41.7   | 43.2 | 43.3     | 44.1     | 46.0     | 46.8     | 46.9 | 47.0     | 47.0 | 47.0     | 47.2 | 47.3     | 47.6  |  |
| GE 5000  | 2 | 40.3                        | 40.3   | 40.3   | 43.5   | 45.8 | 45.9     | 46.4     | 48.2     | 49.2     | 49.3 | 49.4     | 49.4 | 49.4     | 49.5 | 49.6     | 49.9  |  |
| GE 10000 | 2 | 44.3                        | 44.3   | 44.3   | 47.5   | 49.9 | 50.0     | 50.5     | 52.3     | 53.4     | 53.5 | 53.5     | 53.5 | 53.5     | 53.6 | 53.8     | 54.1  |  |
| GE 8000  | 2 | 45.4                        | 45.4   | 45.4   | 48.7   | 51.1 | 51.2     | 51.7     | 53.5     | 54.6     | 54.7 | 54.7     | 54.7 | 54.7     | 54.8 | 55.0     | 55.3  |  |
| GE 6000  | 2 | 46.5                        | 46.5   | 46.5   | 49.9   | 52.3 | 52.4     | 52.9     | 54.7     | 55.8     | 55.9 | 55.9     | 55.9 | 55.9     | 56.0 | 56.2     | 56.5  |  |
| GE 4000  | 2 | 47.6                        | 47.6   | 47.6   | 51.1   | 53.5 | 53.6     | 54.1     | 55.9     | 57.0     | 57.1 | 57.1     | 57.1 | 57.1     | 57.2 | 57.4     | 57.7  |  |
| GE 2000  | 2 | 48.7                        | 48.7   | 48.7   | 52.3   | 54.7 | 54.8     | 55.3     | 57.1     | 58.2     | 58.3 | 58.3     | 58.3 | 58.3     | 58.4 | 58.6     | 58.9  |  |
| GE 1000  | 2 | 49.8                        | 49.8   | 49.8   | 53.5   | 55.9 | 56.0     | 56.5     | 58.3     | 59.4     | 59.5 | 59.5     | 59.5 | 59.5     | 59.6 | 59.8     | 60.1  |  |
| GE 25000 | 2 | 53.8                        | 53.8   | 53.8   | 57.0   | 59.4 | 59.5     | 60.0     | 61.8     | 62.9     | 63.0 | 63.0     | 63.0 | 63.0     | 63.1 | 63.3     | 63.6  |  |
| GE 20000 | 2 | 56.2                        | 56.2   | 56.2   | 59.4   | 61.8 | 61.9     | 62.4     | 64.2     | 65.3     | 65.4 | 65.4     | 65.4 | 65.4     | 65.5 | 65.7     | 66.0  |  |
| GE 15000 | 2 | 60.3                        | 60.3   | 60.3   | 63.5   | 65.9 | 66.0     | 66.5     | 68.3     | 69.4     | 69.5 | 69.5     | 69.5 | 69.5     | 69.6 | 69.8     | 70.1  |  |
| GE 10000 | 2 | 64.3                        | 64.3   | 64.3   | 67.5   | 69.9 | 70.0     | 70.5     | 72.3     | 73.4     | 73.5 | 73.5     | 73.5 | 73.5     | 73.6 | 73.8     | 74.1  |  |
| GE 8000  | 2 | 65.4                        | 65.4   | 65.4   | 68.7   | 71.1 | 71.2     | 71.7     | 73.5     | 74.6     | 74.7 | 74.7     | 74.7 | 74.7     | 74.8 | 75.0     | 75.3  |  |
| GE 6000  | 2 | 66.5                        | 66.5   | 66.5   | 69.9   | 72.3 | 72.4     | 72.9     | 74.7     | 75.8     | 75.9 | 75.9     | 75.9 | 75.9     | 76.0 | 76.2     | 76.5  |  |
| GE 4000  | 2 | 67.6                        | 67.6   | 67.6   | 71.1   | 73.5 | 73.6     | 74.1     | 75.9     | 77.0     | 77.1 | 77.1     | 77.1 | 77.1     | 77.2 | 77.4     | 77.7  |  |
| GE 2000  | 2 | 68.7                        | 68.7   | 68.7   | 72.3   | 74.7 | 74.8     | 75.3     | 77.1     | 78.2     | 78.3 | 78.3     | 78.3 | 78.3     | 78.4 | 78.6     | 78.9  |  |
| GE 1000  | 2 | 69.8                        | 69.8   | 69.8   | 73.5   | 75.9 | 76.0     | 76.5     | 78.3     | 79.4     | 79.5 | 79.5     | 79.5 | 79.5     | 79.6 | 79.8     | 80.1  |  |
| GE 25000 | 2 | 73.8                        | 73.8   | 73.8   | 77.0   | 79.4 | 79.5     | 80.0     | 81.8     | 82.9     | 83.0 | 83.0     | 83.0 | 83.0     | 83.1 | 83.3     | 83.6  |  |
| GE 20000 | 2 | 76.2                        | 76.2   | 76.2   | 79.4   | 81.8 | 81.9     | 82.4     | 84.2     | 85.3     | 85.4 | 85.4     | 85.4 | 85.4     | 85.5 | 85.7     | 86.0  |  |
| GE 15000 | 2 | 80.3                        | 80.3   | 80.3   | 83.5   | 85.9 | 86.0     | 86.5     | 88.3     | 89.4     | 89.5 | 89.5     | 89.5 | 89.5     | 89.6 | 89.8     | 90.1  |  |
| GE 10000 | 2 | 84.3                        | 84.3   | 84.3   | 87.5   | 89.9 | 90.0     | 90.5     | 92.3     | 93.4     | 93.5 | 93.5     | 93.5 | 93.5     | 93.6 | 93.8     | 94.1  |  |
| GE 8000  | 2 | 85.4                        | 85.4   | 85.4   | 88.7   | 91.1 | 91.2     | 91.7     | 93.5     | 94.6     | 94.7 | 94.7     | 94.7 | 94.7     | 94.8 | 95.0     | 95.3  |  |
| GE 6000  | 2 | 86.5                        | 86.5   | 86.5   | 89.9   | 92.3 | 92.4     | 92.9     | 94.7     | 95.8     | 95.9 | 95.9     | 95.9 | 95.9     | 96.0 | 96.2     | 96.5  |  |
| GE 4000  | 2 | 87.6                        | 87.6   | 87.6   | 91.1   | 93.5 | 93.6     | 94.1     | 95.9     | 97.0     | 97.1 | 97.1     | 97.1 | 97.1     | 97.2 | 97.4     | 97.7  |  |
| GE 2000  | 2 | 88.7                        | 88.7   | 88.7   | 92.3   | 94.7 | 94.8     | 95.3     | 97.1     | 98.2     | 98.3 | 98.3     | 98.3 | 98.3     | 98.4 | 98.6     | 98.9  |  |
| GE 1000  | 2 | 89.8                        | 89.8   | 89.8   | 93.5   | 95.9 | 96.0     | 96.5     | 98.3     | 99.4     | 99.5 | 99.5     | 99.5 | 99.5     | 99.6 | 99.8     | 100.1 |  |

TOTAL NUMBER OF OBSERVATIONS: 2749

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/HAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 27595 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 77-86  
MONTH: DEC HOURS (LST): 0000-0200

| CEILING<br>IN<br>FEET | GE | VISIBILITY IN STATUTE MILES |      |      |      |      |      |      |      |      |       |       |       |       |       |       |       |
|-----------------------|----|-----------------------------|------|------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|
|                       |    | GE 1                        | GE 2 | GE 3 | GE 4 | GE 5 | GE 6 | GE 7 | GE 8 | GE 9 | GE 10 | GE 11 | GE 12 | GE 13 | GE 14 | GE 15 | GE 16 |
| NO CEILING            | .7 | 15.0                        | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0  | 15.0  | 15.0  | 15.0  | 15.0  | 15.0  | 15.0  |
| GE 20000              | .3 | 15.0                        | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0  | 15.0  | 15.0  | 15.0  | 15.0  | 15.0  | 15.0  |
| GE 18000              | .3 | 15.0                        | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0  | 15.0  | 15.0  | 15.0  | 15.0  | 15.0  | 15.0  |
| GE 16000              | .3 | 15.0                        | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0  | 15.0  | 15.0  | 15.0  | 15.0  | 15.0  | 15.0  |
| GE 14000              | .3 | 15.0                        | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0  | 15.0  | 15.0  | 15.0  | 15.0  | 15.0  | 15.0  |
| GE 12000              | .3 | 15.0                        | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0 | 15.0  | 15.0  | 15.0  | 15.0  | 15.0  | 15.0  | 15.0  |
| GE 10000              | .3 | 23.3                        | 23.3 | 23.3 | 24.6 | 26.2 | 27.6 | 28.6 | 31.9 | 32.2 | 32.2  | 32.2  | 32.2  | 32.2  | 32.2  | 32.2  | 32.2  |
| GE 9000               | .3 | 23.3                        | 23.3 | 23.3 | 24.6 | 26.2 | 27.6 | 28.6 | 31.9 | 32.2 | 32.2  | 32.2  | 32.2  | 32.2  | 32.2  | 32.2  | 32.2  |
| GE 8000               | .3 | 23.3                        | 23.3 | 23.3 | 24.6 | 26.2 | 27.6 | 28.6 | 31.9 | 32.2 | 32.2  | 32.2  | 32.2  | 32.2  | 32.2  | 32.2  | 32.2  |
| GE 7000               | .3 | 23.3                        | 23.3 | 23.3 | 24.6 | 26.2 | 27.6 | 28.6 | 31.9 | 32.2 | 32.2  | 32.2  | 32.2  | 32.2  | 32.2  | 32.2  | 32.2  |
| GE 6000               | .3 | 23.3                        | 23.3 | 23.3 | 24.6 | 26.2 | 27.6 | 28.6 | 31.9 | 32.2 | 32.2  | 32.2  | 32.2  | 32.2  | 32.2  | 32.2  | 32.2  |
| GE 5000               | .3 | 24.6                        | 24.6 | 24.6 | 25.6 | 27.2 | 28.6 | 29.9 | 32.2 | 32.2 | 32.2  | 32.2  | 32.2  | 32.2  | 32.2  | 32.2  | 32.2  |
| GE 4000               | .3 | 24.6                        | 24.6 | 24.6 | 25.6 | 27.2 | 28.6 | 29.9 | 32.2 | 32.2 | 32.2  | 32.2  | 32.2  | 32.2  | 32.2  | 32.2  | 32.2  |
| GE 3000               | .3 | 24.6                        | 24.6 | 24.6 | 25.6 | 27.2 | 28.6 | 29.9 | 32.2 | 32.2 | 32.2  | 32.2  | 32.2  | 32.2  | 32.2  | 32.2  | 32.2  |
| GE 2000               | .3 | 24.6                        | 24.6 | 24.6 | 25.6 | 27.2 | 28.6 | 29.9 | 32.2 | 32.2 | 32.2  | 32.2  | 32.2  | 32.2  | 32.2  | 32.2  | 32.2  |
| GE 1000               | .3 | 24.6                        | 24.6 | 24.6 | 25.6 | 27.2 | 28.6 | 29.9 | 32.2 | 32.2 | 32.2  | 32.2  | 32.2  | 32.2  | 32.2  | 32.2  | 32.2  |
| GE 0000               | .3 | 24.6                        | 24.6 | 24.6 | 25.6 | 27.2 | 28.6 | 29.9 | 32.2 | 32.2 | 32.2  | 32.2  | 32.2  | 32.2  | 32.2  | 32.2  | 32.2  |
| GE 20000              | .3 | 27.9                        | 27.9 | 27.9 | 29.6 | 31.2 | 33.2 | 34.6 | 38.1 | 38.1 | 38.1  | 38.1  | 38.1  | 38.1  | 38.1  | 38.1  | 38.1  |
| GE 18000              | .3 | 27.9                        | 27.9 | 27.9 | 29.6 | 31.2 | 33.2 | 34.6 | 38.1 | 38.1 | 38.1  | 38.1  | 38.1  | 38.1  | 38.1  | 38.1  | 38.1  |
| GE 16000              | .3 | 27.9                        | 27.9 | 27.9 | 29.6 | 31.2 | 33.2 | 34.6 | 38.1 | 38.1 | 38.1  | 38.1  | 38.1  | 38.1  | 38.1  | 38.1  | 38.1  |
| GE 14000              | .3 | 27.9                        | 27.9 | 27.9 | 29.6 | 31.2 | 33.2 | 34.6 | 38.1 | 38.1 | 38.1  | 38.1  | 38.1  | 38.1  | 38.1  | 38.1  | 38.1  |
| GE 12000              | .3 | 27.9                        | 27.9 | 27.9 | 29.6 | 31.2 | 33.2 | 34.6 | 38.1 | 38.1 | 38.1  | 38.1  | 38.1  | 38.1  | 38.1  | 38.1  | 38.1  |
| GE 10000              | .3 | 44.4                        | 44.4 | 44.4 | 47.5 | 51.2 | 53.2 | 56.5 | 61.5 | 62.5 | 62.5  | 62.5  | 62.5  | 62.5  | 62.5  | 62.5  | 62.5  |
| GE 9000               | .3 | 44.4                        | 44.4 | 44.4 | 47.5 | 51.2 | 53.2 | 56.5 | 61.5 | 62.5 | 62.5  | 62.5  | 62.5  | 62.5  | 62.5  | 62.5  | 62.5  |
| GE 8000               | .3 | 44.4                        | 44.4 | 44.4 | 47.5 | 51.2 | 53.2 | 56.5 | 61.5 | 62.5 | 62.5  | 62.5  | 62.5  | 62.5  | 62.5  | 62.5  | 62.5  |
| GE 7000               | .3 | 44.4                        | 44.4 | 44.4 | 47.5 | 51.2 | 53.2 | 56.5 | 61.5 | 62.5 | 62.5  | 62.5  | 62.5  | 62.5  | 62.5  | 62.5  | 62.5  |
| GE 6000               | .3 | 44.4                        | 44.4 | 44.4 | 47.5 | 51.2 | 53.2 | 56.5 | 61.5 | 62.5 | 62.5  | 62.5  | 62.5  | 62.5  | 62.5  | 62.5  | 62.5  |
| GE 5000               | .3 | 51.2                        | 51.2 | 51.2 | 53.2 | 56.5 | 58.1 | 61.5 | 66.5 | 67.7 | 67.7  | 67.7  | 67.7  | 67.7  | 67.7  | 67.7  | 67.7  |
| GE 4000               | .3 | 51.2                        | 51.2 | 51.2 | 53.2 | 56.5 | 58.1 | 61.5 | 66.5 | 67.7 | 67.7  | 67.7  | 67.7  | 67.7  | 67.7  | 67.7  | 67.7  |
| GE 3000               | .3 | 51.2                        | 51.2 | 51.2 | 53.2 | 56.5 | 58.1 | 61.5 | 66.5 | 67.7 | 67.7  | 67.7  | 67.7  | 67.7  | 67.7  | 67.7  | 67.7  |
| GE 2000               | .3 | 51.2                        | 51.2 | 51.2 | 53.2 | 56.5 | 58.1 | 61.5 | 66.5 | 67.7 | 67.7  | 67.7  | 67.7  | 67.7  | 67.7  | 67.7  | 67.7  |
| GE 1000               | .3 | 51.2                        | 51.2 | 51.2 | 53.2 | 56.5 | 58.1 | 61.5 | 66.5 | 67.7 | 67.7  | 67.7  | 67.7  | 67.7  | 67.7  | 67.7  | 67.7  |
| GE 0000               | .3 | 51.2                        | 51.2 | 51.2 | 53.2 | 56.5 | 58.1 | 61.5 | 66.5 | 67.7 | 67.7  | 67.7  | 67.7  | 67.7  | 67.7  | 67.7  | 67.7  |

TOTAL NUMBER OF OBSERVATIONS: 101

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AFIP WEATHER SERVICE/MSC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275601 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 77-86  
MONTH: DEC HOURS (LST): 0300-0500

| CEILING<br>IN<br>FEET | VISIBILITY IN STATUTE MILES |      |      |      |      |      |      |       |       |       |        |        |        |        |         |
|-----------------------|-----------------------------|------|------|------|------|------|------|-------|-------|-------|--------|--------|--------|--------|---------|
|                       | 1                           | 1/2  | 1/4  | 1/8  | 1/16 | 1/32 | 1/64 | 1/128 | 1/256 | 1/512 | 1/1024 | 1/2048 | 1/4096 | 1/8192 | 1/16384 |
| NO CEILING            | 15.3                        | 17.7 | 15.3 | 13.7 | 16.0 | 16.0 | 16.3 | 17.3  | 17.7  | 17.7  | 18.0   | 19.3   | 19.7   | 18.7   | 19.3    |
| GE 1000               | 14.3                        | 14.3 | 14.3 | 15.0 | 17.7 | 17.7 | 19.0 | 19.0  | 19.3  | 19.7  | 19.7   | 19.7   | 20.3   | 20.3   | 21.0    |
| GE 1600               | 14.3                        | 14.3 | 14.3 | 15.0 | 17.7 | 17.7 | 18.0 | 19.0  | 19.3  | 19.7  | 19.7   | 19.7   | 20.3   | 20.3   | 21.0    |
| GE 1800               | 14.3                        | 14.3 | 14.3 | 15.0 | 17.7 | 17.7 | 18.0 | 19.0  | 19.3  | 19.7  | 19.7   | 19.7   | 20.3   | 20.3   | 21.0    |
| GE 1900               | 14.3                        | 14.3 | 14.3 | 15.0 | 17.7 | 17.7 | 18.0 | 19.0  | 19.3  | 19.7  | 19.7   | 19.7   | 20.3   | 20.3   | 21.0    |
| GE 2000               | 14.3                        | 14.3 | 14.3 | 15.0 | 17.7 | 17.7 | 18.0 | 19.0  | 19.3  | 19.7  | 19.7   | 19.7   | 20.3   | 20.3   | 21.0    |
| GE 2200               | 14.3                        | 14.3 | 14.3 | 15.0 | 17.7 | 17.7 | 18.0 | 19.0  | 19.3  | 19.7  | 19.7   | 19.7   | 20.3   | 20.3   | 21.0    |
| GE 2400               | 14.3                        | 14.3 | 14.3 | 15.0 | 17.7 | 17.7 | 18.0 | 19.0  | 19.3  | 19.7  | 19.7   | 19.7   | 20.3   | 20.3   | 21.0    |
| GE 2600               | 14.3                        | 14.3 | 14.3 | 15.0 | 17.7 | 17.7 | 18.0 | 19.0  | 19.3  | 19.7  | 19.7   | 19.7   | 20.3   | 20.3   | 21.0    |
| GE 2800               | 14.3                        | 14.3 | 14.3 | 15.0 | 17.7 | 17.7 | 18.0 | 19.0  | 19.3  | 19.7  | 19.7   | 19.7   | 20.3   | 20.3   | 21.0    |
| GE 3000               | 14.3                        | 14.3 | 14.3 | 15.0 | 17.7 | 17.7 | 18.0 | 19.0  | 19.3  | 19.7  | 19.7   | 19.7   | 20.3   | 20.3   | 21.0    |
| GE 3200               | 14.3                        | 14.3 | 14.3 | 15.0 | 17.7 | 17.7 | 18.0 | 19.0  | 19.3  | 19.7  | 19.7   | 19.7   | 20.3   | 20.3   | 21.0    |
| GE 3400               | 14.3                        | 14.3 | 14.3 | 15.0 | 17.7 | 17.7 | 18.0 | 19.0  | 19.3  | 19.7  | 19.7   | 19.7   | 20.3   | 20.3   | 21.0    |
| GE 3600               | 14.3                        | 14.3 | 14.3 | 15.0 | 17.7 | 17.7 | 18.0 | 19.0  | 19.3  | 19.7  | 19.7   | 19.7   | 20.3   | 20.3   | 21.0    |
| GE 3800               | 14.3                        | 14.3 | 14.3 | 15.0 | 17.7 | 17.7 | 18.0 | 19.0  | 19.3  | 19.7  | 19.7   | 19.7   | 20.3   | 20.3   | 21.0    |
| GE 4000               | 14.3                        | 14.3 | 14.3 | 15.0 | 17.7 | 17.7 | 18.0 | 19.0  | 19.3  | 19.7  | 19.7   | 19.7   | 20.3   | 20.3   | 21.0    |
| GE 4200               | 14.3                        | 14.3 | 14.3 | 15.0 | 17.7 | 17.7 | 18.0 | 19.0  | 19.3  | 19.7  | 19.7   | 19.7   | 20.3   | 20.3   | 21.0    |
| GE 4400               | 14.3                        | 14.3 | 14.3 | 15.0 | 17.7 | 17.7 | 18.0 | 19.0  | 19.3  | 19.7  | 19.7   | 19.7   | 20.3   | 20.3   | 21.0    |
| GE 4600               | 14.3                        | 14.3 | 14.3 | 15.0 | 17.7 | 17.7 | 18.0 | 19.0  | 19.3  | 19.7  | 19.7   | 19.7   | 20.3   | 20.3   | 21.0    |
| GE 4800               | 14.3                        | 14.3 | 14.3 | 15.0 | 17.7 | 17.7 | 18.0 | 19.0  | 19.3  | 19.7  | 19.7   | 19.7   | 20.3   | 20.3   | 21.0    |
| GE 5000               | 14.3                        | 14.3 | 14.3 | 15.0 | 17.7 | 17.7 | 18.0 | 19.0  | 19.3  | 19.7  | 19.7   | 19.7   | 20.3   | 20.3   | 21.0    |
| GE 5200               | 14.3                        | 14.3 | 14.3 | 15.0 | 17.7 | 17.7 | 18.0 | 19.0  | 19.3  | 19.7  | 19.7   | 19.7   | 20.3   | 20.3   | 21.0    |
| GE 5400               | 14.3                        | 14.3 | 14.3 | 15.0 | 17.7 | 17.7 | 18.0 | 19.0  | 19.3  | 19.7  | 19.7   | 19.7   | 20.3   | 20.3   | 21.0    |
| GE 5600               | 14.3                        | 14.3 | 14.3 | 15.0 | 17.7 | 17.7 | 18.0 | 19.0  | 19.3  | 19.7  | 19.7   | 19.7   | 20.3   | 20.3   | 21.0    |
| GE 5800               | 14.3                        | 14.3 | 14.3 | 15.0 | 17.7 | 17.7 | 18.0 | 19.0  | 19.3  | 19.7  | 19.7   | 19.7   | 20.3   | 20.3   | 21.0    |
| GE 6000               | 14.3                        | 14.3 | 14.3 | 15.0 | 17.7 | 17.7 | 18.0 | 19.0  | 19.3  | 19.7  | 19.7   | 19.7   | 20.3   | 20.3   | 21.0    |
| GE 6200               | 14.3                        | 14.3 | 14.3 | 15.0 | 17.7 | 17.7 | 18.0 | 19.0  | 19.3  | 19.7  | 19.7   | 19.7   | 20.3   | 20.3   | 21.0    |
| GE 6400               | 14.3                        | 14.3 | 14.3 | 15.0 | 17.7 | 17.7 | 18.0 | 19.0  | 19.3  | 19.7  | 19.7   | 19.7   | 20.3   | 20.3   | 21.0    |
| GE 6600               | 14.3                        | 14.3 | 14.3 | 15.0 | 17.7 | 17.7 | 18.0 | 19.0  | 19.3  | 19.7  | 19.7   | 19.7   | 20.3   | 20.3   | 21.0    |
| GE 6800               | 14.3                        | 14.3 | 14.3 | 15.0 | 17.7 | 17.7 | 18.0 | 19.0  | 19.3  | 19.7  | 19.7   | 19.7   | 20.3   | 20.3   | 21.0    |
| GE 7000               | 14.3                        | 14.3 | 14.3 | 15.0 | 17.7 | 17.7 | 18.0 | 19.0  | 19.3  | 19.7  | 19.7   | 19.7   | 20.3   | 20.3   | 21.0    |
| GE 7200               | 14.3                        | 14.3 | 14.3 | 15.0 | 17.7 | 17.7 | 18.0 | 19.0  | 19.3  | 19.7  | 19.7   | 19.7   | 20.3   | 20.3   | 21.0    |
| GE 7400               | 14.3                        | 14.3 | 14.3 | 15.0 | 17.7 | 17.7 | 18.0 | 19.0  | 19.3  | 19.7  | 19.7   | 19.7   | 20.3   | 20.3   | 21.0    |
| GE 7600               | 14.3                        | 14.3 | 14.3 | 15.0 | 17.7 | 17.7 | 18.0 | 19.0  | 19.3  | 19.7  | 19.7   | 19.7   | 20.3   | 20.3   | 21.0    |
| GE 7800               | 14.3                        | 14.3 | 14.3 | 15.0 | 17.7 | 17.7 | 18.0 | 19.0  | 19.3  | 19.7  | 19.7   | 19.7   | 20.3   | 20.3   | 21.0    |
| GE 8000               | 14.3                        | 14.3 | 14.3 | 15.0 | 17.7 | 17.7 | 18.0 | 19.0  | 19.3  | 19.7  | 19.7   | 19.7   | 20.3   | 20.3   | 21.0    |
| GE 8200               | 14.3                        | 14.3 | 14.3 | 15.0 | 17.7 | 17.7 | 18.0 | 19.0  | 19.3  | 19.7  | 19.7   | 19.7   | 20.3   | 20.3   | 21.0    |
| GE 8400               | 14.3                        | 14.3 | 14.3 | 15.0 | 17.7 | 17.7 | 18.0 | 19.0  | 19.3  | 19.7  | 19.7   | 19.7   | 20.3   | 20.3   | 21.0    |
| GE 8600               | 14.3                        | 14.3 | 14.3 | 15.0 | 17.7 | 17.7 | 18.0 | 19.0  | 19.3  | 19.7  | 19.7   | 19.7   | 20.3   | 20.3   | 21.0    |
| GE 8800               | 14.3                        | 14.3 | 14.3 | 15.0 | 17.7 | 17.7 | 18.0 | 19.0  | 19.3  | 19.7  | 19.7   | 19.7   | 20.3   | 20.3   | 21.0    |
| GE 9000               | 14.3                        | 14.3 | 14.3 | 15.0 | 17.7 | 17.7 | 18.0 | 19.0  | 19.3  | 19.7  | 19.7   | 19.7   | 20.3   | 20.3   | 21.0    |
| GE 9200               | 14.3                        | 14.3 | 14.3 | 15.0 | 17.7 | 17.7 | 18.0 | 19.0  | 19.3  | 19.7  | 19.7   | 19.7   | 20.3   | 20.3   | 21.0    |
| GE 9400               | 14.3                        | 14.3 | 14.3 | 15.0 | 17.7 | 17.7 | 18.0 | 19.0  | 19.3  | 19.7  | 19.7   | 19.7   | 20.3   | 20.3   | 21.0    |
| GE 9600               | 14.3                        | 14.3 | 14.3 | 15.0 | 17.7 | 17.7 | 18.0 | 19.0  | 19.3  | 19.7  | 19.7   | 19.7   | 20.3   | 20.3   | 21.0    |
| GE 9800               | 14.3                        | 14.3 | 14.3 | 15.0 | 17.7 | 17.7 | 18.0 | 19.0  | 19.3  | 19.7  | 19.7   | 19.7   | 20.3   | 20.3   | 21.0    |
| GE 10000              | 14.3                        | 14.3 | 14.3 | 15.0 | 17.7 | 17.7 | 18.0 | 19.0  | 19.3  | 19.7  | 19.7   | 19.7   | 20.3   | 20.3   | 21.0    |

TOTAL NUMBER OF OBSERVATIONS: 70

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM FOURLY OBSERVATIONS

PERIOD OF RECORD: 77-86  
MONTH: DEC HOURS(EST): 0600-0600

TOTAL NUMBER OF OBSERVATIONS: 244

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM FOURTH OBSERVATIONS

PERIOD OF RECORD: 77-86  
MONTH: DEC HOURS(LST): 0900-1100

| CEILING |   | VISIBILITY IN STATUTE MILES |        |        |        |        |      |          |          |          |      |          |          |          |      |          |  |
|---------|---|-----------------------------|--------|--------|--------|--------|------|----------|----------|----------|------|----------|----------|----------|------|----------|--|
| IN FEET |   | GE 1/8                      | GE 1/4 | GE 3/8 | GE 1/2 | GE 3/4 | GE 1 | GE 1 1/4 | GE 1 1/2 | GE 1 3/4 | GE 2 | GE 2 1/4 | GE 2 1/2 | GE 2 3/4 | GE 3 | GE 3 1/4 |  |
| NO CEIL | 1 | 1.4                         | 14.3   | 14.5   | 14.6   | 14.7   | 14.8 | 14.9     | 15.0     | 15.1     | 15.2 | 15.3     | 15.4     | 15.5     | 15.6 | 15.7     |  |
| GE 200  | 1 | 1.4                         | 15.4   | 15.7   | 15.7   | 17.1   | 18.6 | 18.9     | 19.3     | 20.4     | 20.7 | 21.1     | 21.1     | 21.4     | 21.4 | 22.1     |  |
| GE 180  | 1 | 1.4                         | 15.4   | 15.7   | 15.7   | 17.1   | 18.6 | 18.9     | 19.3     | 20.4     | 20.7 | 21.1     | 21.1     | 21.4     | 21.4 | 22.1     |  |
| GE 160  | 1 | 1.4                         | 15.4   | 15.7   | 15.7   | 17.1   | 18.6 | 18.9     | 19.3     | 20.4     | 20.7 | 21.1     | 21.1     | 21.4     | 21.4 | 22.1     |  |
| GE 140  | 1 | 1.4                         | 15.4   | 15.7   | 15.7   | 17.1   | 18.6 | 18.9     | 19.3     | 20.4     | 20.7 | 21.1     | 21.1     | 21.4     | 21.4 | 22.1     |  |
| GE 120  | 1 | 1.4                         | 15.4   | 15.7   | 15.7   | 17.1   | 18.6 | 18.9     | 19.3     | 20.4     | 20.7 | 21.1     | 21.1     | 21.4     | 21.4 | 22.1     |  |
| GE 100  | 1 | 1.4                         | 15.4   | 15.7   | 15.7   | 17.1   | 18.6 | 18.9     | 19.3     | 20.4     | 20.7 | 21.1     | 21.1     | 21.4     | 21.4 | 22.1     |  |
| GE 80   | 1 | 1.4                         | 24.3   | 24.6   | 24.6   | 26.4   | 28.9 | 29.3     | 33.7     | 33.2     | 33.6 | 33.6     | 33.9     | 34.3     | 34.3 | 35.4     |  |
| GE 60   | 1 | 1.4                         | 24.3   | 24.6   | 24.6   | 26.4   | 28.9 | 29.3     | 33.7     | 33.2     | 33.6 | 33.6     | 33.9     | 34.3     | 34.3 | 35.4     |  |
| GE 40   | 1 | 1.4                         | 24.3   | 24.6   | 24.6   | 26.4   | 28.9 | 29.3     | 33.7     | 33.2     | 33.6 | 33.6     | 33.9     | 34.3     | 34.3 | 35.4     |  |
| GE 20   | 1 | 1.4                         | 24.3   | 24.6   | 24.6   | 26.4   | 28.9 | 29.3     | 33.7     | 33.2     | 33.6 | 33.6     | 33.9     | 34.3     | 34.3 | 35.4     |  |
| GE 10   | 1 | 1.4                         | 24.3   | 24.6   | 24.6   | 26.4   | 28.9 | 29.3     | 33.7     | 33.2     | 33.6 | 33.6     | 33.9     | 34.3     | 34.3 | 35.4     |  |
| GE 500  | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 35.7     |  |
| GE 400  | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 300  | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 200  | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 180  | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 160  | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 140  | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 120  | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 100  | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 80   | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 60   | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 40   | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 20   | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 10   | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 500  | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 400  | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 300  | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 200  | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 180  | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 160  | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 140  | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 120  | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 100  | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 80   | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 60   | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 40   | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 20   | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 10   | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 500  | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 400  | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 300  | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 200  | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 180  | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 160  | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 140  | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 120  | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 100  | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 80   | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 60   | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 40   | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 20   | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 10   | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 500  | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 400  | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 300  | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 200  | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 180  | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 160  | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 140  | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 120  | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 100  | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 80   | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 60   | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 40   | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 20   | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 10   | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 500  | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 400  | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 300  | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 200  | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 180  | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 160  | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 140  | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 120  | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 100  | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 80   | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 60   | 1 | 1.4                         | 24.6   | 25.0   | 25.0   | 26.8   | 29.3 | 29.6     | 31.1     | 33.6     | 33.9 | 34.3     | 34.3     | 34.6     | 35.0 | 36.1     |  |
| GE 40   | 1 | 1.4                         | 24.6   | 25.0</ |        |        |      |          |          |          |      |          |          |          |      |          |  |

TOTAL NUMBER OF OBSERVATIONS: 740

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

PERIOD OF RECORD: 77-86  
MONTH: DEC HOURS(LST): 1200-1400

| CEILING  |   | VISIBILITY IN STATUTE MILES |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
|----------|---|-----------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| IN FEET  | 1 | GE 1/2                      | GE 3/4 | GE 5/8 | GE 3/4 | GE 3/4 | GE 3/4 | GE 3/4 | GE 3/4 | GE 3/4 | GE 3/4 | GE 3/4 | GE 3/4 | GE 3/4 | GE 3/4 | GE 3/4 | GE 3/4 |
| NO CEIL  | 1 | .7                          | 20.9   | 21.3   | 21.3   | 21.6   | 23.3   | 23.6   | 24.3   | 26.0   | 26.0   | 26.4   | 26.4   | 26.4   | 27.0   | 27.0   | 27.0   |
| GE 00000 | 1 | .7                          | 27.3   | 23.6   | 23.6   | 24.0   | 25.7   | 26.0   | 26.7   | 28.4   | 28.7   | 29.1   | 29.1   | 29.4   | 30.1   | 30.1   | 30.1   |
| GE 10000 | 1 | .7                          | 23.3   | 23.6   | 23.6   | 24.0   | 25.7   | 26.0   | 26.7   | 28.4   | 28.7   | 29.1   | 29.1   | 29.4   | 30.1   | 30.1   | 30.1   |
| GE 16000 | 1 | .7                          | 23.3   | 23.6   | 23.6   | 24.0   | 25.7   | 26.0   | 26.7   | 28.4   | 28.7   | 29.1   | 29.1   | 29.4   | 30.1   | 30.1   | 30.1   |
| GE 18000 | 1 | .7                          | 23.3   | 23.6   | 23.6   | 24.0   | 25.7   | 26.0   | 26.7   | 28.4   | 28.7   | 29.1   | 29.1   | 29.4   | 30.1   | 30.1   | 30.1   |
| GE 10000 | 1 | .7                          | 23.3   | 23.6   | 23.6   | 24.0   | 25.7   | 26.0   | 26.7   | 28.4   | 28.7   | 29.1   | 29.1   | 29.4   | 30.1   | 30.1   | 30.1   |
| GE 10000 | 1 | .7                          | 23.3   | 23.6   | 23.6   | 24.0   | 25.7   | 26.0   | 26.7   | 28.4   | 28.7   | 29.1   | 29.1   | 29.4   | 30.1   | 30.1   | 30.1   |
| GE 10000 | 1 | .7                          | 23.3   | 23.6   | 23.6   | 24.0   | 25.7   | 26.0   | 26.7   | 28.4   | 28.7   | 29.1   | 29.1   | 29.4   | 30.1   | 30.1   | 30.1   |
| GE 10000 | 1 | .7                          | 23.3   | 23.6   | 23.6   | 24.0   | 25.7   | 26.0   | 26.7   | 28.4   | 28.7   | 29.1   | 29.1   | 29.4   | 30.1   | 30.1   | 30.1   |
| GE 10000 | 1 | .7                          | 23.3   | 23.6   | 23.6   | 24.0   | 25.7   | 26.0   | 26.7   | 28.4   | 28.7   | 29.1   | 29.1   | 29.4   | 30.1   | 30.1   | 30.1   |
| GE 10000 | 1 | .7                          | 23.3   | 23.6   | 23.6   | 24.0   | 25.7   | 26.0   | 26.7   | 28.4   | 28.7   | 29.1   | 29.1   | 29.4   | 30.1   | 30.1   | 30.1   |
| GE 10000 | 1 | .7                          | 23.3   | 23.6   | 23.6   | 24.0   | 25.7   | 26.0   | 26.7   | 28.4   | 28.7   | 29.1   | 29.1   | 29.4   | 30.1   | 30.1   | 30.1   |
| GE 10000 | 1 | .7                          | 23.3   | 23.6   | 23.6   | 24.0   | 25.7   | 26.0   | 26.7   | 28.4   | 28.7   | 29.1   | 29.1   | 29.4   | 30.1   | 30.1   | 30.1   |
| GE 10000 | 1 | .7                          | 23.3   | 23.6   | 23.6   | 24.0   | 25.7   | 26.0   | 26.7   | 28.4   | 28.7   | 29.1   | 29.1   | 29.4   | 30.1   | 30.1   | 30.1   |
| GE 10000 | 1 | .7                          | 23.3   | 23.6   | 23.6   | 24.0   | 25.7   | 26.0   | 26.7   | 28.4   | 28.7   | 29.1   | 29.1   | 29.4   | 30.1   | 30.1   | 30.1   |
| GE 10000 | 1 | .7                          | 23.3   | 23.6   | 23.6   | 24.0   | 25.7   | 26.0   | 26.7   | 28.4   | 28.7   | 29.1   | 29.1   | 29.4   | 30.1   | 30.1   | 30.1   |
| GE 10000 | 1 | .7                          | 23.3   | 23.6   | 23.6   | 24.0   | 25.7   | 26.0   | 26.7   | 28.4   | 28.7   | 29.1   | 29.1   | 29.4   | 30.1   | 30.1   | 30.1   |
| GE 10000 | 1 | .7                          | 23.3   | 23.6   | 23.6   | 24.0   | 25.7   | 26.0   | 26.7   | 28.4   | 28.7   | 29.1   | 29.1   | 29.4   | 30.1   | 30.1   | 30.1   |
| GE 10000 | 1 | .7                          | 23.3   | 23.6   | 23.6   | 24.0   | 25.7   | 26.0   | 26.7   | 28.4   | 28.7   | 29.1   | 29.1   | 29.4   | 30.1   | 30.1   | 30.1   |
| GE 10000 | 1 | .7                          | 23.3   | 23.6   | 23.6   | 24.0   | 25.7   | 26.0   | 26.7   | 28.4   | 28.7   | 29.1   | 29.1   | 29.4   | 30.1   | 30.1   | 30.1   |
| GE 10000 | 1 | .7                          | 23.3   | 23.6   | 23.6   | 24.0   | 25.7   | 26.0   | 26.7   | 28.4   | 28.7   | 29.1   | 29.1   | 29.4   | 30.1   | 30.1   | 30.1   |
| GE 10000 | 1 | .7                          | 23.3   | 23.6   | 23.6   | 24.0   | 25.7   | 26.0   | 26.7   | 28.4   | 28.7   | 29.1   | 29.1   | 29.4   | 30.1   | 30.1   | 30.1   |
| GE 10000 | 1 | .7                          | 23.3   | 23.6   | 23.6   | 24.0   | 25.7   | 26.0   | 26.7   | 28.4   | 28.7   | 29.1   | 29.1   | 29.4   | 30.1   | 30.1   | 30.1   |
| GE 10000 | 1 | .7                          | 23.3   | 23.6   | 23.6   | 24.0   | 25.7   | 26.0   | 26.7   | 28.4   | 28.7   | 29.1   | 29.1   | 29.4   | 30.1   | 30.1   | 30.1   |
| GE 10000 | 1 | .7                          | 23.3   | 23.6   | 23.6   | 24.0   | 25.7   | 26.0   | 26.7   | 28.4   | 28.7   | 29.1   | 29.1   | 29.4   | 30.1   | 30.1   | 30.1   |
| GE 10000 | 1 | .7                          | 23.3   | 23.6   | 23.6   | 24.0   | 25.7   | 26.0   | 26.7   | 28.4   | 28.7   | 29.1   | 29.1   | 29.4   | 30.1   | 30.1   | 30.1   |
| GE 10000 | 1 | .7                          | 23.3   | 23.6   | 23.6   | 24.0   | 25.7   | 26.0   | 26.7   | 28.4   | 28.7   | 29.1   | 29.1   | 29.4   | 30.1   | 30.1   | 30.1   |
| GE 10000 | 1 | .7                          | 23.3   | 23.6   | 23.6   | 24.0   | 25.7   | 26.0   | 26.7   | 28.4   | 28.7   | 29.1   | 29.1   | 29.4   | 30.1   | 30.1   | 30.1   |
| GE 10000 | 1 | .7                          | 23.3   | 23.6   | 23.6   | 24.0   | 25.7   | 26.0   | 26.7   | 28.4   | 28.7   | 29.1   | 29.1   | 29.4   | 30.1   | 30.1   | 30.1   |
| GE 10000 | 1 | .7                          | 23.3   | 23.6   | 23.6   | 24.0   | 25.7   | 26.0   | 26.7   | 28.4   | 28.7   | 29.1   | 29.1   | 29.4   | 30.1   | 30.1   | 30.1   |
| GE 10000 | 1 | .7                          | 23.3   | 23.6   | 23.6   | 24.0   | 25.7   | 26.0   | 26.7   | 28.4   | 28.7   | 29.1   | 29.1   | 29.4   | 30.1   | 30.1   | 30.1   |
| GE 10000 | 1 | .7                          | 23.3   | 23.6   | 23.6   | 24.0   | 25.7   | 26.0   | 26.7   | 28.4   | 28.7   | 29.1   | 29.1   | 29.4   | 30.1   | 30.1   | 30.1   |
| GE 10000 | 1 | .7                          | 23.3   | 23.6   | 23.6   | 24.0   | 25.7   | 26.0   | 26.7   | 28.4   | 28.7   | 29.1   | 29.1   | 29.4   | 30.1   | 30.1   | 30.1   |
| GE 10000 | 1 | .7                          | 23.3   | 23.6   | 23.6   | 24.0   | 25.7   | 26.0   | 26.7   | 28.4   | 28.7   | 29.1   | 29.1   | 29.4   | 30.1   | 30.1   | 30.1   |
| GE 10000 | 1 | .7                          | 23.3   | 23.6   | 23.6   | 24.0   | 25.7   | 26.0   | 26.7   | 28.4   | 28.7   | 29.1   | 29.1   | 29.4   | 30.1   | 30.1   | 30.1   |
| GE 10000 | 1 | .7                          | 23.3   | 23.6   | 23.6   | 24.0   | 25.7   | 26.0   | 26.7   | 28.4   | 28.7   | 29.1   | 29.1   | 29.4   | 30.1   | 30.1   | 30.1   |
| GE 10000 | 1 | .7                          | 23.3   | 23.6   | 23.6   | 24.0   | 25.7   | 26.0   | 26.7   | 28.4   | 28.7   | 29.1   | 29.1   | 29.4   | 30.1   | 30.1   | 30.1   |
| GE 10000 | 1 | .7                          | 23.3   | 23.6   | 23.6   | 24.0   | 25.7   | 26.0   | 26.7   | 28.4   | 28.7   | 29.1   | 29.1   | 29.4   | 30.1   | 30.1   | 30.1   |
| GE 10000 | 1 | .7                          | 23.3   | 23.6   | 23.6   | 24.0   | 25.7   | 26.0   | 26.7   | 28.4   | 28.7   | 29.1   | 29.1   | 29.4   | 30.1   | 30.1   | 30.1   |
| GE 10000 | 1 | .7                          | 23.3   | 23.6   | 23.6   | 24.0   | 25.7   | 26.0   | 26.7   | 28.4   | 28.7   | 29.1   | 29.1   | 29.4   | 30.1   | 30.1   | 30.1   |
| GE 10000 | 1 | .7                          | 23.3   | 23.6   | 23.6   | 24.0   | 25.7   | 26.0   | 26.7   | 28.4   | 28.7   | 29.1   | 29.1   | 29.4   | 30.1   | 30.1   | 30.1   |
| GE 10000 | 1 | .7                          | 23.3   | 23.6   | 23.6   | 24.0   | 25.7   | 26.0   | 26.7   | 28.4   | 28.7   | 29.1   | 29.1   | 29.4   | 30.1   | 30.1   | 30.1   |
| GE 10000 | 1 | .7                          | 23.3   | 23.6   | 23.6   | 24.0   | 25.7   | 26.0   | 26.7   | 28.4   | 28.7   | 29.1   | 29.1   | 29.4   | 30.1   | 30.1   | 30.1   |
| GE 10000 | 1 | .7                          | 23.3   | 23.6   | 23.6   | 24.0   | 25.7   | 26.0   | 26.7   | 28.4   | 28.7   | 29.1   | 29.1   | 29.4   | 30.1   | 30.1   | 30.1   |
| GE 10000 | 1 | .7                          | 23.3   | 23.6   | 23.6   | 24.0   | 25.7   | 26.0   | 26.7   | 28.4   | 28.7   | 29.1   | 29.1   | 29.4   | 30.1   | 30.1   | 30.1   |
| GE 10000 | 1 | .7                          | 23.3   | 23.6   | 23.6   | 24.0   | 25.7   | 26.0   | 26.7   | 28.4   | 28.7   | 29.1   | 29.1   | 29.4   | 30.1   | 30.1   | 30.1   |
| GE 10000 | 1 | .7                          | 23.3   | 23.6   | 23.6   | 24.0   | 25.7   | 26.0   | 26.7   | 28.4   | 28.7   | 29.1   | 29.1   | 29.4   | 30.1   | 30.1   | 30.1   |
| GE 10000 | 1 | .7                          | 23.3   | 23.6   | 23.6   | 24.0   | 25.7   | 26.0   | 26.7   | 28.4   | 28.7   | 29.1   | 29.1   | 29.4   | 30.1   | 30.1   | 30.1   |
| GE 10000 | 1 | .7                          | 23.3   | 23.6   | 23.6   | 24.0   | 25.7   | 26.0   | 26.7   | 28.4   | 28.7   | 29.1   | 29.1   | 29.4   | 30.1   | 30.1   | 30.1   |
| GE 10000 | 1 | .7                          | 23.3   | 23.6   | 23.6</ |        |        |        |        |        |        |        |        |        |        |        |        |

TOTAL NUMBER OF OBSERVATIONS: 240

GLOBAL CLIMATOLOGY BRANCH  
USAF/ETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 27595 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 77-86  
MONTH: DEC HOURS(LOCAL): 1500-1700

| CEILING<br>IN<br>FEET | VISIBILITY IN STATUTE MILES |        |        |      |          |          |          |      |          |          |          |      |          |          |          |      |
|-----------------------|-----------------------------|--------|--------|------|----------|----------|----------|------|----------|----------|----------|------|----------|----------|----------|------|
|                       | 1                           | GE 1/2 | GE 3/4 | GE 1 | GE 1 1/4 | GE 1 1/2 | GE 1 3/4 | GE 2 | GE 2 1/4 | GE 2 1/2 | GE 2 3/4 | GE 3 | GE 3 1/4 | GE 3 1/2 | GE 3 3/4 | GE 4 |
| NO CLIC 1             |                             | 18.8   | 19.1   | 19.4 | 19.7     | 21.7     | 21.7     | 22.0 | 22.0     | 23.4     | 23.4     | 23.4 | 23.4     | 23.4     | 23.4     | 24.0 |
| GE 20001              |                             | 22.7   | 22.7   | 22.7 | 23.7     | 25.7     | 25.7     | 26.0 | 27.0     | 27.3     | 27.3     | 27.3 | 27.3     | 27.3     | 27.3     | 28.0 |
| GE 18001              |                             | 22.7   | 22.7   | 22.7 | 23.7     | 25.7     | 25.7     | 26.0 | 27.0     | 27.3     | 27.3     | 27.3 | 27.3     | 27.3     | 27.3     | 28.0 |
| GE 16001              |                             | 22.7   | 22.7   | 22.7 | 23.7     | 25.7     | 25.7     | 26.0 | 27.0     | 27.3     | 27.3     | 27.3 | 27.3     | 27.3     | 27.3     | 28.0 |
| GE 14001              |                             | 22.7   | 22.7   | 22.7 | 23.7     | 25.7     | 25.7     | 26.0 | 27.0     | 27.3     | 27.3     | 27.3 | 27.3     | 27.3     | 27.3     | 28.0 |
| GE 12001              |                             | 22.7   | 22.7   | 22.7 | 23.7     | 25.7     | 25.7     | 26.0 | 27.0     | 27.3     | 27.3     | 27.3 | 27.3     | 27.3     | 27.3     | 28.0 |
| GE 10001              |                             | 33.2   | 34.5   | 34.5 | 36.5     | 40.1     | 40.1     | 41.1 | 43.4     | 44.1     | 44.4     | 44.4 | 45.1     | 45.4     | 45.4     | 46.1 |
| GE 9001               |                             | 33.2   | 34.5   | 34.5 | 36.5     | 40.1     | 40.1     | 41.1 | 43.4     | 44.1     | 44.4     | 44.4 | 45.1     | 45.4     | 45.4     | 46.1 |
| GE 8001               |                             | 33.2   | 34.5   | 34.5 | 36.5     | 40.1     | 40.1     | 41.1 | 43.4     | 44.1     | 44.4     | 44.4 | 45.1     | 45.4     | 45.4     | 46.1 |
| GE 7001               |                             | 33.2   | 34.5   | 34.5 | 36.5     | 40.1     | 40.1     | 41.1 | 43.4     | 44.1     | 44.4     | 44.4 | 45.1     | 45.4     | 45.4     | 46.1 |
| GE 6001               |                             | 33.2   | 34.5   | 34.5 | 36.5     | 40.1     | 40.1     | 41.1 | 43.4     | 44.1     | 44.4     | 44.4 | 45.1     | 45.4     | 45.4     | 46.1 |
| GE 5001               |                             | 33.6   | 34.9   | 34.9 | 36.8     | 40.5     | 40.5     | 41.4 | 43.8     | 44.4     | 44.7     | 44.7 | 45.4     | 45.7     | 45.7     | 46.4 |
| GE 4501               |                             | 33.6   | 34.9   | 34.9 | 36.8     | 40.5     | 40.5     | 41.4 | 43.8     | 44.4     | 44.7     | 44.7 | 45.4     | 45.7     | 45.7     | 46.4 |
| GE 4001               |                             | 34.9   | 36.2   | 36.2 | 38.5     | 42.1     | 42.1     | 43.1 | 45.4     | 46.1     | 46.4     | 46.4 | 47.0     | 47.4     | 47.4     | 48.0 |
| GE 3501               |                             | 34.9   | 36.2   | 36.2 | 38.5     | 42.1     | 42.1     | 43.1 | 45.4     | 46.1     | 46.4     | 46.4 | 47.0     | 47.4     | 47.4     | 48.0 |
| GE 3001               |                             | 36.2   | 37.8   | 37.8 | 40.1     | 43.6     | 43.6     | 44.7 | 47.0     | 47.7     | 47.7     | 47.7 | 48.0     | 48.0     | 48.0     | 49.7 |
| GE 2501               |                             | 37.8   | 39.5   | 39.5 | 41.8     | 45.4     | 45.4     | 46.4 | 48.7     | 49.3     | 49.7     | 49.7 | 50.3     | 50.7     | 50.7     | 51.3 |
| GE 2001               |                             | 40.1   | 40.1   | 40.1 | 44.4     | 48.0     | 48.0     | 49.0 | 52.0     | 52.6     | 52.7     | 53.0 | 53.6     | 53.9     | 53.9     | 54.6 |
| GE 1801               |                             | 40.6   | 40.8   | 42.8 | 45.4     | 49.3     | 49.3     | 50.3 | 53.3     | 53.9     | 54.3     | 54.3 | 54.9     | 55.3     | 55.3     | 55.9 |
| GE 1601               |                             | 42.1   | 44.1   | 44.1 | 46.7     | 51.6     | 51.6     | 52.6 | 56.3     | 56.9     | 57.2     | 57.2 | 57.9     | 58.2     | 58.2     | 58.9 |
| GE 1401               |                             | 47.4   | 49.7   | 49.7 | 53.3     | 59.2     | 59.2     | 60.2 | 64.1     | 64.9     | 65.1     | 65.1 | 65.9     | 66.1     | 66.1     | 66.8 |
| GE 1201               |                             | 49.3   | 51.6   | 51.6 | 56.3     | 62.2     | 62.2     | 64.5 | 68.8     | 69.7     | 70.1     | 70.1 | 73.7     | 71.1     | 71.1     | 71.7 |
| GE 1001               |                             | 50.3   | 52.6   | 52.6 | 57.6     | 64.5     | 64.5     | 65.9 | 70.1     | 71.1     | 71.4     | 71.4 | 72.7     | 72.7     | 72.7     | 73.4 |
| GE 901                |                             | 51.6   | 52.6   | 53.6 | 58.9     | 66.1     | 66.1     | 67.4 | 72.4     | 73.4     | 73.7     | 73.7 | 74.3     | 74.7     | 75.0     | 75.7 |
| GE 801                |                             | 52.6   | 54.3   | 54.3 | 59.9     | 67.4     | 67.4     | 69.1 | 74.0     | 75.1     | 75.3     | 75.3 | 76.0     | 76.3     | 76.6     | 77.3 |
| GE 701                |                             | 53.6   | 55.3   | 55.3 | 61.5     | 70.4     | 70.4     | 72.0 | 77.3     | 81.3     | 81.3     | 81.3 | 82.6     | 82.9     | 83.2     | 83.9 |
| GE 601                |                             | 55.3   | 55.6   | 55.6 | 61.8     | 71.1     | 71.1     | 73.4 | 81.3     | 84.2     | 85.9     | 85.9 | 86.8     | 87.8     | 88.2     | 88.8 |
| GE 501                |                             | 55.3   | 55.6   | 55.6 | 61.8     | 71.1     | 71.1     | 73.7 | 82.2     | 85.9     | 87.5     | 87.5 | 89.8     | 91.1     | 91.4     | 92.1 |
| GE 401                |                             | 55.3   | 55.6   | 55.6 | 62.2     | 71.4     | 71.4     | 74.0 | 84.2     | 88.8     | 91.4     | 91.4 | 94.1     | 95.7     | 96.1     | 97.0 |
| GE 301                |                             | 55.3   | 55.6   | 55.6 | 62.2     | 71.4     | 71.4     | 74.0 | 84.2     | 88.8     | 91.4     | 91.4 | 94.1     | 95.7     | 97.4     | 98.7 |
| GE 201                |                             | 55.3   | 55.6   | 55.6 | 62.2     | 71.4     | 71.4     | 74.0 | 84.2     | 88.8     | 91.4     | 91.4 | 94.1     | 95.7     | 97.4     | 98.7 |
| GE 101                |                             | 55.3   | 55.6   | 55.6 | 62.2     | 71.4     | 71.4     | 74.0 | 84.2     | 88.8     | 91.4     | 91.4 | 94.1     | 95.7     | 97.4     | 98.7 |
| GE 01                 |                             | 55.3   | 55.6   | 55.6 | 62.2     | 71.4     | 71.4     | 74.0 | 84.2     | 88.8     | 91.4     | 91.4 | 94.1     | 95.7     | 97.4     | 98.7 |

TOTAL NUMBER OF OBSERVATIONS: 334

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275957 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 77-84  
MONTH: DEC HOURS(LST): 1800-2000

| CEILING<br>IN<br>FEET | VISIBILITY IN STATUTE MILES |             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |
|-----------------------|-----------------------------|-------------|---------|---------|---------|---------|---------|---------|---------|---------|----------|----------|----------|----------|----------|----------|
|                       | GE<br>1                     | GE<br>1 1/2 | GE<br>2 | GE<br>3 | GE<br>4 | GE<br>5 | GE<br>6 | GE<br>7 | GE<br>8 | GE<br>9 | GE<br>10 | GE<br>11 | GE<br>12 | GE<br>13 | GE<br>14 | GE<br>15 |
| NO CEIL               |                             |             |         |         |         |         |         |         |         |         |          |          |          |          |          |          |
| GE 20000              | 18.3                        | 18.3        | 18.3    | 18.7    | 21.0    | 21.7    | 21.7    | 21.7    | 24.3    | 24.3    | 24.3     | 24.3     | 24.7     | 24.7     | 24.7     | 24.7     |
| GE 18000              | 19.0                        | 19.0        | 19.0    | 19.3    | 21.7    | 22.3    | 22.3    | 24.3    | 25.0    | 25.0    | 25.0     | 25.0     | 25.3     | 25.3     | 25.3     | 25.3     |
| GE 16000              | 19.0                        | 19.0        | 19.0    | 19.3    | 21.7    | 22.3    | 22.3    | 24.3    | 25.0    | 25.0    | 25.0     | 25.0     | 25.3     | 25.3     | 25.3     | 25.3     |
| GE 14000              | 19.0                        | 19.0        | 19.0    | 19.3    | 21.7    | 22.3    | 22.3    | 24.3    | 25.0    | 25.0    | 25.0     | 25.0     | 25.3     | 25.3     | 25.3     | 25.3     |
| GE 12000              | 19.0                        | 19.0        | 19.0    | 19.3    | 21.7    | 22.3    | 22.3    | 24.3    | 25.0    | 25.0    | 25.0     | 25.0     | 25.3     | 25.3     | 25.3     | 25.3     |
| GE 10000              | 32.7                        | 32.7        | 32.7    | 34.7    | 37.7    | 38.3    | 39.0    | 42.3    | 43.3    | 43.3    | 43.3     | 43.3     | 43.7     | 43.7     | 43.7     | 43.7     |
| GE 9000               | 32.7                        | 32.7        | 32.7    | 34.7    | 37.7    | 38.3    | 39.0    | 42.3    | 43.3    | 43.3    | 43.3     | 43.3     | 43.7     | 43.7     | 43.7     | 43.7     |
| GE 8000               | 32.7                        | 32.7        | 32.7    | 34.7    | 37.7    | 38.3    | 39.0    | 42.3    | 43.3    | 43.3    | 43.3     | 43.3     | 43.7     | 43.7     | 43.7     | 43.7     |
| GE 7000               | 32.7                        | 32.7        | 32.7    | 34.7    | 37.7    | 38.3    | 39.0    | 42.3    | 43.3    | 43.3    | 43.3     | 43.3     | 43.7     | 43.7     | 43.7     | 43.7     |
| GE 6000               | 32.7                        | 32.7        | 32.7    | 34.7    | 37.7    | 38.3    | 39.0    | 42.3    | 43.3    | 43.3    | 43.3     | 43.3     | 43.7     | 43.7     | 43.7     | 43.7     |
| GE 5000               | 33.0                        | 33.0        | 33.0    | 35.0    | 38.0    | 38.7    | 39.3    | 42.7    | 43.7    | 43.7    | 43.7     | 43.7     | 44.0     | 44.0     | 44.0     | 44.0     |
| GE 4500               | 33.0                        | 33.0        | 33.0    | 35.0    | 38.0    | 38.7    | 39.3    | 42.7    | 43.7    | 43.7    | 43.7     | 43.7     | 44.0     | 44.0     | 44.0     | 44.0     |
| GE 4000               | 33.0                        | 33.0        | 33.0    | 35.0    | 38.0    | 38.7    | 39.3    | 42.7    | 43.7    | 43.7    | 43.7     | 43.7     | 44.0     | 44.0     | 44.0     | 44.0     |
| GE 3500               | 33.7                        | 33.7        | 33.7    | 35.7    | 38.7    | 39.3    | 40.0    | 43.3    | 44.3    | 44.3    | 44.3     | 44.3     | 44.7     | 44.7     | 44.7     | 44.7     |
| GE 3000               | 34.3                        | 34.3        | 34.3    | 37.0    | 40.0    | 40.7    | 41.3    | 44.7    | 45.7    | 45.7    | 45.7     | 45.7     | 46.0     | 46.0     | 46.0     | 46.0     |
| GE 2500               | 46.3                        | 46.3        | 46.3    | 48.3    | 51.7    | 52.3    | 53.0    | 56.7    | 57.7    | 57.7    | 57.7     | 57.7     | 58.0     | 58.0     | 58.0     | 58.0     |
| GE 2000               | 46.3                        | 46.3        | 46.3    | 48.3    | 51.7    | 52.3    | 53.0    | 56.7    | 57.7    | 57.7    | 57.7     | 57.7     | 58.0     | 58.0     | 58.0     | 58.0     |
| GE 1500               | 50.3                        | 50.3        | 50.3    | 55.0    | 61.0    | 61.7    | 62.3    | 66.7    | 68.7    | 68.7    | 68.7     | 68.7     | 69.0     | 69.0     | 69.0     | 69.0     |
| GE 1000               | 51.3                        | 51.3        | 51.3    | 56.0    | 61.3    | 62.3    | 63.3    | 68.0    | 70.2    | 70.3    | 70.3     | 70.3     | 70.7     | 71.0     | 71.0     | 71.0     |
| GE 900                | 52.3                        | 52.3        | 52.3    | 57.3    | 61.3    | 62.3    | 63.3    | 68.0    | 70.2    | 70.3    | 70.3     | 70.3     | 70.7     | 71.0     | 71.0     | 71.0     |
| GE 800                | 52.7                        | 52.7        | 52.7    | 58.0    | 61.3    | 62.3    | 63.3    | 68.0    | 70.2    | 70.3    | 70.3     | 70.3     | 70.7     | 71.0     | 71.0     | 71.0     |
| GE 700                | 52.7                        | 52.7        | 52.7    | 58.0    | 61.3    | 62.3    | 63.3    | 68.0    | 70.2    | 70.3    | 70.3     | 70.3     | 70.7     | 71.0     | 71.0     | 71.0     |
| GE 600                | 52.7                        | 52.7        | 52.7    | 58.0    | 61.3    | 62.3    | 63.3    | 68.0    | 70.2    | 70.3    | 70.3     | 70.3     | 70.7     | 71.0     | 71.0     | 71.0     |
| GE 500                | 52.7                        | 52.7        | 52.7    | 58.0    | 61.3    | 62.3    | 63.3    | 68.0    | 70.2    | 70.3    | 70.3     | 70.3     | 70.7     | 71.0     | 71.0     | 71.0     |
| GE 400                | 52.7                        | 52.7        | 52.7    | 58.0    | 61.3    | 62.3    | 63.3    | 68.0    | 70.2    | 70.3    | 70.3     | 70.3     | 70.7     | 71.0     | 71.0     | 71.0     |
| GE 300                | 52.7                        | 52.7        | 52.7    | 58.0    | 61.3    | 62.3    | 63.3    | 68.0    | 70.2    | 70.3    | 70.3     | 70.3     | 70.7     | 71.0     | 71.0     | 71.0     |
| GE 200                | 52.7                        | 52.7        | 52.7    | 58.0    | 61.3    | 62.3    | 63.3    | 68.0    | 70.2    | 70.3    | 70.3     | 70.3     | 70.7     | 71.0     | 71.0     | 71.0     |
| GE 100                | 52.7                        | 52.7        | 52.7    | 58.0    | 61.3    | 62.3    | 63.3    | 68.0    | 70.2    | 70.3    | 70.3     | 70.3     | 70.7     | 71.0     | 71.0     | 71.0     |
| GE 0                  | 56.7                        | 56.7        | 56.7    | 64.3    | 71.3    | 72.7    | 73.7    | 76.0    | 85.0    | 85.0    | 85.0     | 85.0     | 85.3     | 85.3     | 85.3     | 85.3     |

TOTAL NUMBER OF OBSERVATIONS: 300

GLOBAL CLIMATOLOGY BRANCH  
USAF/ETAL  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275957 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 77-86  
MONTH: DEC HOURS/LSST: 2100-2300

| CEILING<br>IN<br>FEET | VISIBILITY IN STATUTE MILES |          |         |         |         |         |             |         |             |             |         |           |           |           |            |           |
|-----------------------|-----------------------------|----------|---------|---------|---------|---------|-------------|---------|-------------|-------------|---------|-----------|-----------|-----------|------------|-----------|
|                       | GE<br>1                     | GE<br>10 | GE<br>6 | GE<br>5 | GE<br>4 | GE<br>3 | GE<br>2 1/2 | GE<br>2 | GE<br>1 1/2 | GE<br>1 1/4 | GE<br>1 | GE<br>3/4 | GE<br>5/8 | GE<br>1/2 | GE<br>5/16 | GE<br>1/4 |
| NO CEIL               |                             | 17.1     | 17.1    | 17.1    | 17.4    | 20.1    | 21.1        | 21.7    | 23.7        | 23.7        | 24.1    | 24.3      | 24.3      | 25.0      | 25.0       | 25.7      |
| GE 2000               |                             | 17.8     | 17.8    | 17.8    | 18.1    | 20.7    | 21.7        | 22.4    | 24.3        | 24.3        | 25.0    | 25.0      | 25.0      | 25.7      | 25.7       | 26.3      |
| GE 1800               |                             | 17.8     | 17.8    | 17.8    | 18.1    | 20.7    | 21.7        | 22.4    | 24.3        | 24.3        | 25.0    | 25.0      | 25.0      | 25.7      | 25.7       | 26.3      |
| GE 1600               |                             | 17.8     | 17.8    | 17.8    | 18.1    | 20.7    | 21.7        | 22.4    | 24.3        | 24.3        | 25.0    | 25.0      | 25.0      | 25.7      | 25.7       | 26.3      |
| GE 1400               |                             | 17.8     | 17.8    | 17.8    | 18.1    | 20.7    | 21.7        | 22.4    | 24.3        | 24.3        | 25.0    | 25.0      | 25.0      | 25.7      | 25.7       | 26.3      |
| GE 1200               |                             | 17.8     | 17.8    | 17.8    | 18.1    | 20.7    | 21.7        | 22.4    | 24.3        | 24.3        | 25.0    | 25.0      | 25.0      | 25.7      | 25.7       | 26.3      |
| GE 1000               |                             | 26.3     | 26.3    | 26.3    | 28.6    | 32.6    | 34.2        | 35.5    | 39.1        | 39.1        | 39.1    | 39.1      | 39.1      | 40.5      | 40.5       | 41.1      |
| GE 900                |                             | 26.3     | 26.3    | 26.3    | 28.6    | 32.6    | 34.2        | 35.5    | 39.1        | 39.1        | 39.1    | 39.1      | 39.1      | 40.5      | 40.5       | 41.1      |
| GE 800                |                             | 26.3     | 26.3    | 26.3    | 28.6    | 32.6    | 34.2        | 35.5    | 39.1        | 39.1        | 39.1    | 39.1      | 39.1      | 40.5      | 40.5       | 41.1      |
| GE 700                |                             | 26.3     | 26.3    | 26.3    | 28.6    | 32.6    | 34.2        | 35.5    | 39.1        | 39.1        | 39.1    | 39.1      | 39.1      | 40.5      | 40.5       | 41.1      |
| GE 600                |                             | 26.3     | 26.3    | 26.3    | 28.6    | 32.6    | 34.2        | 35.5    | 39.1        | 39.1        | 39.1    | 39.1      | 39.1      | 40.5      | 40.5       | 41.1      |
| GE 500                |                             | 27.6     | 27.6    | 27.6    | 29.9    | 33.9    | 34.9        | 36.2    | 39.8        | 39.8        | 40.5    | 40.5      | 40.5      | 41.1      | 41.1       | 41.8      |
| GE 450                |                             | 27.6     | 27.6    | 27.6    | 29.9    | 33.9    | 34.9        | 36.2    | 39.8        | 39.8        | 40.5    | 40.5      | 40.5      | 41.1      | 41.1       | 41.8      |
| GE 400                |                             | 27.6     | 27.6    | 27.6    | 29.9    | 33.9    | 34.9        | 36.2    | 39.8        | 39.8        | 40.5    | 40.5      | 40.5      | 41.1      | 41.1       | 41.8      |
| GE 350                |                             | 28.6     | 28.6    | 28.6    | 30.9    | 34.9    | 35.5        | 37.2    | 41.4        | 41.4        | 42.1    | 42.1      | 42.1      | 42.8      | 42.8       | 43.4      |
| GE 300                |                             | 28.6     | 28.6    | 28.6    | 30.9    | 34.9    | 35.5        | 37.2    | 41.4        | 41.4        | 42.1    | 42.1      | 42.1      | 42.8      | 42.8       | 43.4      |
| GE 250                |                             | 29.9     | 29.9    | 29.9    | 32.6    | 37.2    | 37.8        | 39.5    | 43.4        | 43.4        | 44.1    | 44.1      | 44.1      | 45.4      | 45.4       | 46.7      |
| GE 200                |                             | 32.6     | 32.6    | 32.6    | 35.2    | 40.5    | 42.1        | 43.4    | 47.4        | 47.4        | 48.1    | 48.1      | 48.1      | 49.8      | 49.8       | 51.3      |
| GE 180                |                             | 34.2     | 34.2    | 34.2    | 37.2    | 42.1    | 43.4        | 44.1    | 48.1        | 48.1        | 49.8    | 49.8      | 49.8      | 51.3      | 51.3       | 52.9      |
| GE 160                | .7                          | 37.2     | 37.2    | 37.2    | 41.1    | 46.4    | 48.1        | 49.8    | 53.2        | 53.2        | 54.9    | 54.9      | 54.9      | 56.6      | 56.6       | 58.3      |
| GE 140                | .3                          | 43.4     | 43.4    | 43.4    | 46.7    | 52.6    | 54.2        | 55.6    | 59.9        | 59.9        | 60.9    | 60.9      | 60.9      | 62.9      | 62.9       | 64.2      |
| GE 120                | .3                          | 48.4     | 48.4    | 48.4    | 53.3    | 59.9    | 61.5        | 62.8    | 67.1        | 67.1        | 68.4    | 68.4      | 68.4      | 69.4      | 69.4       | 70.1      |
| GE 100                | .3                          | 50.0     | 50.0    | 50.0    | 55.2    | 61.6    | 63.5        | 64.8    | 69.1        | 69.1        | 70.4    | 70.4      | 70.4      | 71.4      | 71.4       | 72.0      |
| GE 90                 | .7                          | 51.3     | 51.3    | 51.3    | 56.9    | 64.1    | 65.8        | 67.1    | 71.7        | 71.7        | 72.7    | 72.7      | 72.7      | 73.4      | 73.4       | 74.7      |
| GE 80                 | .7                          | 52.6     | 52.6    | 52.6    | 58.2    | 65.8    | 67.4        | 68.6    | 73.7        | 73.7        | 74.7    | 74.7      | 74.7      | 75.4      | 75.4       | 76.3      |
| GE 70                 | .7                          | 53.9     | 53.9    | 53.9    | 60.5    | 68.4    | 70.4        | 72.7    | 78.2        | 78.2        | 79.6    | 79.6      | 79.6      | 80.9      | 80.9       | 82.2      |
| GE 60                 | .3                          | 54.6     | 54.6    | 54.6    | 61.8    | 70.1    | 72.4        | 75.0    | 81.6        | 81.6        | 83.0    | 83.0      | 83.0      | 84.2      | 84.2       | 85.2      |
| GE 50                 | .7                          | 54.9     | 54.9    | 54.9    | 62.5    | 70.7    | 73.4        | 76.0    | 83.9        | 83.9        | 85.2    | 85.2      | 85.2      | 86.2      | 86.2       | 87.2      |
| GE 40                 | .3                          | 54.9     | 54.9    | 54.9    | 62.5    | 71.7    | 74.3        | 77.3    | 85.9        | 85.9        | 87.3    | 87.3      | 87.3      | 88.4      | 88.4       | 89.4      |
| GE 30                 | .3                          | 54.9     | 54.9    | 54.9    | 62.5    | 71.7    | 74.3        | 77.3    | 85.9        | 85.9        | 87.3    | 87.3      | 87.3      | 88.4      | 88.4       | 89.4      |
| GE 20                 | .7                          | 54.9     | 54.9    | 54.9    | 62.5    | 71.7    | 74.3        | 77.3    | 85.9        | 85.9        | 87.3    | 87.3      | 87.3      | 88.4      | 88.4       | 89.4      |
| GE 10                 | .3                          | 54.9     | 54.9    | 54.9    | 62.5    | 71.7    | 74.3        | 77.3    | 85.9        | 85.9        | 87.3    | 87.3      | 87.3      | 88.4      | 88.4       | 89.4      |
| GE 0                  | .3                          | 54.9     | 54.9    | 54.9    | 62.5    | 71.7    | 74.3        | 77.3    | 85.9        | 85.9        | 87.3    | 87.3      | 87.3      | 88.4      | 88.4       | 89.4      |
| GE 0                  | .3                          | 54.9     | 54.9    | 54.9    | 62.5    | 71.7    | 74.3        | 77.3    | 85.9        | 85.9        | 87.3    | 87.3      | 87.3      | 88.4      | 88.4       | 89.4      |

TOTAL NUMBER OF OBSERVATIONS: 324

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

PERIOD OF RECORD: 77-86  
MONTH: DEC HOURS(LST): ALL

TOTAL NUMBER OF OBSERVATIONS: 2379

TOTAL NUMBER OF OBSERVATIONS: 2379

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF CEILING VERSUS VISIBILITY  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275650 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 77-87  
MONTH: ALL HOURS(IST): ALL

| CEILING<br>IN<br>FEET | VISIBILITY IN STATUTE MILES |         |         |         |         |         |         |         |         |          |          |          |          |          |          |          |
|-----------------------|-----------------------------|---------|---------|---------|---------|---------|---------|---------|---------|----------|----------|----------|----------|----------|----------|----------|
|                       | GE<br>1                     | GE<br>2 | GE<br>3 | GE<br>4 | GE<br>5 | GE<br>6 | GE<br>7 | GE<br>8 | GE<br>9 | GE<br>10 | GE<br>11 | GE<br>12 | GE<br>13 | GE<br>14 | GE<br>15 | GE<br>16 |
| NO CEIL               | .7                          | 34.1    | 34.1    | 34.1    | 34.2    | 36.3    | 36.4    | 36.8    | 37.7    | 38.0     | 38.2     | 38.3     | 38.4     | 38.5     | 38.6     | 38.9     |
| GE 2000               | .7                          | 36.7    | 36.8    | 36.8    | 37.7    | 39.2    | 39.2    | 39.7    | 40.7    | 41.0     | 41.2     | 41.3     | 41.4     | 41.6     | 41.6     | 41.9     |
| GE 1500               | .3                          | 36.7    | 36.8    | 36.8    | 37.7    | 39.2    | 39.2    | 39.7    | 40.7    | 41.0     | 41.2     | 41.3     | 41.4     | 41.6     | 41.6     | 41.9     |
| GE 1000               | .3                          | 36.7    | 36.8    | 36.8    | 37.7    | 39.2    | 39.2    | 39.7    | 40.7    | 41.0     | 41.2     | 41.3     | 41.4     | 41.6     | 41.6     | 41.9     |
| GE 800                | .7                          | 36.7    | 36.8    | 36.8    | 37.7    | 39.2    | 39.2    | 39.7    | 40.7    | 41.0     | 41.2     | 41.3     | 41.4     | 41.6     | 41.6     | 41.9     |
| GE 600                | .3                          | 36.7    | 36.8    | 36.8    | 37.7    | 39.2    | 39.2    | 39.7    | 40.7    | 41.0     | 41.2     | 41.3     | 41.4     | 41.6     | 41.6     | 41.9     |
| GE 400                | .7                          | 49.9    | 51.0    | 50.0    | 51.6    | 54.0    | 54.2    | 55.0    | 56.8    | 57.3     | 57.5     | 57.7     | 57.8     | 58.1     | 58.2     | 58.5     |
| GE 300                | .7                          | 49.9    | 51.0    | 50.0    | 51.6    | 54.0    | 54.2    | 55.0    | 56.8    | 57.3     | 57.5     | 57.7     | 57.8     | 58.1     | 58.2     | 58.5     |
| GE 200                | .3                          | 49.9    | 51.0    | 50.0    | 51.6    | 54.0    | 54.2    | 55.0    | 56.8    | 57.3     | 57.5     | 57.7     | 57.8     | 58.1     | 58.2     | 58.5     |
| GE 100                | .7                          | 49.9    | 51.0    | 50.0    | 51.6    | 54.0    | 54.2    | 55.0    | 56.8    | 57.3     | 57.5     | 57.7     | 57.8     | 58.1     | 58.2     | 58.5     |
| GE 50                 | .4                          | 53.2    | 53.5    | 53.5    | 52.1    | 54.5    | 54.7    | 55.5    | 57.3    | 57.7     | 58.0     | 58.2     | 58.3     | 58.6     | 58.7     | 59.0     |
| GE 30                 | .4                          | 53.2    | 53.5    | 53.5    | 52.1    | 54.5    | 54.7    | 55.5    | 57.3    | 57.7     | 58.0     | 58.2     | 58.3     | 58.6     | 58.7     | 59.0     |
| GE 20                 | .4                          | 53.2    | 53.5    | 53.5    | 52.1    | 54.5    | 54.7    | 55.5    | 57.3    | 57.7     | 58.0     | 58.2     | 58.3     | 58.6     | 58.7     | 59.0     |
| GE 15                 | .4                          | 53.2    | 53.5    | 53.5    | 52.1    | 54.5    | 54.7    | 55.5    | 57.3    | 57.7     | 58.0     | 58.2     | 58.3     | 58.6     | 58.7     | 59.0     |
| GE 10                 | .4                          | 53.2    | 53.5    | 53.5    | 52.1    | 54.5    | 54.7    | 55.5    | 57.3    | 57.7     | 58.0     | 58.2     | 58.3     | 58.6     | 58.7     | 59.0     |
| GE 5                  | .4                          | 53.2    | 53.5    | 53.5    | 52.1    | 54.5    | 54.7    | 55.5    | 57.3    | 57.7     | 58.0     | 58.2     | 58.3     | 58.6     | 58.7     | 59.0     |
| GE 2                  | .4                          | 53.2    | 53.5    | 53.5    | 52.1    | 54.5    | 54.7    | 55.5    | 57.3    | 57.7     | 58.0     | 58.2     | 58.3     | 58.6     | 58.7     | 59.0     |
| GE 1                  | .4                          | 53.2    | 53.5    | 53.5    | 52.1    | 54.5    | 54.7    | 55.5    | 57.3    | 57.7     | 58.0     | 58.2     | 58.3     | 58.6     | 58.7     | 59.0     |
| GE 0                  | .4                          | 53.2    | 53.5    | 53.5    | 52.1    | 54.5    | 54.7    | 55.5    | 57.3    | 57.7     | 58.0     | 58.2     | 58.3     | 58.6     | 58.7     | 59.0     |
| GE 2500               | .4                          | 61.7    | 61.9    | 61.9    | 63.8    | 66.6    | 66.9    | 67.6    | 69.7    | 70.2     | 70.5     | 70.7     | 70.9     | 71.1     | 71.2     | 71.6     |
| GE 2000               | .4                          | 64.1    | 64.3    | 64.4    | 66.4    | 69.5    | 69.7    | 70.7    | 72.7    | 73.2     | 73.5     | 73.7     | 73.9     | 74.1     | 74.2     | 74.6     |
| GE 1500               | .4                          | 65.1    | 65.2    | 65.3    | 67.4    | 70.5    | 70.8    | 71.6    | 73.8    | 74.3     | 74.6     | 74.8     | 75.0     | 75.3     | 75.4     | 75.7     |
| GE 1000               | .4                          | 67.1    | 67.2    | 67.3    | 69.5    | 72.6    | 73.0    | 74.1    | 76.2    | 76.6     | 77.1     | 77.3     | 77.5     | 77.7     | 77.8     | 78.2     |
| GE 800                | .5                          | 70.1    | 70.2    | 70.3    | 72.9    | 76.6    | 76.9    | 78.1    | 80.5    | 81.1     | 81.4     | 81.7     | 81.9     | 82.1     | 82.2     | 82.6     |
| GE 600                | .5                          | 71.9    | 72.1    | 72.1    | 75.0    | 79.2    | 79.5    | 80.8    | 83.4    | 84.1     | 84.5     | 84.7     | 84.9     | 85.2     | 85.3     | 85.7     |
| GE 400                | .5                          | 72.3    | 72.3    | 72.3    | 75.6    | 79.9    | 80.2    | 81.7    | 84.3    | 85.0     | 85.4     | 85.6     | 85.8     | 86.1     | 86.2     | 86.6     |
| GE 300                | .5                          | 73.1    | 73.3    | 73.3    | 76.5    | 81.0    | 81.3    | 82.8    | 85.6    | 86.4     | 86.7     | 87.0     | 87.2     | 87.5     | 87.6     | 88.0     |
| GE 200                | .5                          | 73.4    | 73.7    | 73.7    | 77.1    | 81.6    | 82.2    | 83.8    | 86.7    | 87.5     | 87.8     | 88.1     | 88.4     | 88.7     | 88.8     | 89.2     |
| GE 100                | .5                          | 74.2    | 74.5    | 74.5    | 78.3    | 83.4    | 83.8    | 85.8    | 89.4    | 90.3     | 90.7     | 91.2     | 91.4     | 91.5     | 91.7     | 92.3     |
| GE 50                 | .5                          | 74.4    | 74.7    | 74.8    | 78.7    | 83.9    | 84.4    | 86.6    | 90.5    | 91.7     | 92.0     | 92.7     | 92.9     | 93.3     | 93.4     | 93.9     |
| GE 30                 | .5                          | 74.7    | 75.0    | 75.0    | 79.1    | 84.6    | 85.1    | 87.5    | 91.9    | 93.2     | 94.3     | 94.6     | 94.9     | 95.4     | 95.5     | 96.0     |
| GE 20                 | .5                          | 74.7    | 75.0    | 75.1    | 79.2    | 84.6    | 85.3    | 87.9    | 92.6    | 94.0     | 95.1     | 95.4     | 96.2     | 96.9     | 97.1     | 97.7     |
| GE 15                 | .5                          | 74.7    | 75.0    | 75.1    | 79.2    | 84.6    | 85.3    | 88.0    | 92.8    | 94.6     | 95.6     | 96.4     | 97.0     | 97.9     | 98.1     | 99.1     |
| GE 10                 | .5                          | 74.7    | 75.0    | 75.1    | 79.2    | 84.6    | 85.4    | 88.0    | 92.8    | 94.6     | 95.6     | 96.5     | 97.1     | 98.2     | 98.5     | 99.8     |
| GE 5                  | .5                          | 74.7    | 75.0    | 75.1    | 79.2    | 84.6    | 85.4    | 88.0    | 92.8    | 94.6     | 95.6     | 96.5     | 97.1     | 98.2     | 98.5     | 100.0    |

TOTAL NUMBER OF OBSERVATIONS: 26148

GLOBAL CLIMATOLOGY BRANCH  
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PERCENTAGE FREQUENCY OF OCCURRENCE OF SKY COVER  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 27595 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: JAN

| PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER |      |   |   |     |     |     |     |   |     |      |      |      |              |
|---------------------------------------------------|------|---|---|-----|-----|-----|-----|---|-----|------|------|------|--------------|
| HOURS<br>(LST)                                    | 0    | 1 | 2 | 3   | 4   | 5   | 6   | 7 | 8   | 9    | 10   | MEAN | TOTAL<br>OBS |
| 00-02                                             | 15.6 |   |   | 2.7 | 2.3 | 1.7 | 3.7 |   | 2.0 | 15.0 | 56.7 | 7.7  | 300          |
| 03-05                                             | 15.8 |   |   | 2.6 | 1.3 | 2.0 | 2.0 |   | 3.0 | 14.8 | 58.2 | 7.8  | 304          |
| 06-08                                             | 16.7 |   |   | 1.7 | 2.0 |     | 3.7 |   | 3.7 | 13.9 | 58.2 | 7.7  | 294          |
| 09-11                                             | 11.6 |   |   | 2.2 | 3.3 | 1.1 | 3.3 |   | 5.5 | 14.2 | 56.9 | 8.1  | 275          |
| 12-14                                             | 14.3 |   |   | 3.4 | 3.0 | 1.7 | 5.4 |   | 6.7 | 9.1  | 56.3 | 7.5  | 298          |
| 15-17                                             | 13.2 |   |   | 3.9 | 3.3 | 1.0 | 2.0 |   | 5.9 | 13.2 | 56.9 | 7.8  | 304          |
| 18-20                                             | 21.9 |   |   | 2.3 | 3.3 | .3  | 2.3 |   | 7.3 | 11.9 | 54.6 | 7.2  | 302          |
| 21-23                                             | 21.0 |   |   | 1.0 | 3.3 | 1.0 | 3.0 |   | 3.6 | 13.6 | 53.3 | 7.2  | 302          |
| TOTALS                                            | 16.4 |   |   | 2.5 | 2.7 | 1.1 | 3.2 |   | 4.3 | 13.2 | 56.6 | 7.6  | 2379         |

STATION NUMBER: 27595 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: FEB

| PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER |      |    |   |     |     |     |     |   |     |      |      |      |              |
|---------------------------------------------------|------|----|---|-----|-----|-----|-----|---|-----|------|------|------|--------------|
| HOURS<br>(LST)                                    | 0    | 1  | 2 | 3   | 4   | 5   | 6   | 7 | 8   | 9    | 10   | MEAN | TOTAL<br>OBS |
| 00-02                                             | 32.6 |    |   | 1.5 | 2.2 | 1.5 | 2.6 |   | 5.1 | 10.6 | 44.3 | 6.1  | 273          |
| 03-05                                             | 30.6 |    |   | 4.3 | .7  | 1.1 | 1.1 |   | 3.6 | 10.1 | 48.6 | 6.3  | 278          |
| 06-08                                             | 31.4 |    |   | 1.1 | 1.8 | .7  | 1.4 |   | 5.3 | 10.6 | 46.7 | 6.3  | 274          |
| 09-11                                             | 20.9 |    |   | 4.0 | 2.0 | .8  | 3.2 |   | 5.7 | 5.9  | 54.5 | 7.1  | 253          |
| 12-14                                             | 26.2 |    |   | 4.7 | 3.3 | 1.8 | 2.6 |   | 5.3 | 5.5  | 47.3 | 6.4  | 275          |
| 15-17                                             | 29.1 | .4 |   | 4.0 | 4.0 | 1.9 | 4.0 |   | 6.5 | 13.6 | 40.4 | 6.4  | 275          |
| 18-20                                             | 23.7 |    |   | 7.5 | 3.9 | 1.4 | 3.9 |   | 6.3 | 11.5 | 41.6 | 6.4  | 279          |
| 21-23                                             | 34.7 | .4 |   | 2.2 | 4.0 | .7  | 3.6 |   | 5.4 | 11.5 | 37.4 | 5.7  | 278          |
| TOTALS                                            | 2.3  | .1 |   | 3.7 | 2.7 | 1.2 | 2.8 |   | 6.2 | 9.9  | 45.1 | 6.3  | 2185         |

GLOBAL CLIMATOLOGY BRANCH  
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PERCENTAGE FREQUENCY OF OCCURRENCE OF SKY COVER  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 270950 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 74-87  
MONTH: MAR

| PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER |      |     |   |      |     |     |     |   |      |      |      |      |              |
|---------------------------------------------------|------|-----|---|------|-----|-----|-----|---|------|------|------|------|--------------|
| HOURS<br>(LST)                                    | 0    | 1   | 2 | 3    | 4   | 5   | 6   | 7 | 8    | 9    | 10   | MEAN | TOTAL<br>OBS |
| 00-02                                             | 77.1 |     |   | 1.7  | 1.7 | 1.0 | 4.3 |   | 1.0  | 8.4  | 19.8 | 5.5  | 299          |
| 03-05                                             | 13.8 |     |   | 5.3  | 2.3 | 1.7 | 3.0 |   | 4.3  | 7.9  | 17.8 | 5.3  | 304          |
| 06-08                                             | 27.6 |     |   | 5.3  | 5.3 | 1.6 | 3.0 |   | 1.7  | 7.9  | 42.1 | 6.1  | 304          |
| 09-11                                             | 23.3 | 1.4 |   | 3.6  | 3.6 | 1.8 | 4.7 |   | 7.2  | 8.3  | 42.0 | 6.2  | 276          |
| 12-14                                             | 27.1 | 1.3 |   | 4.7  | 3.3 | 1.7 | 4.3 |   | 10.2 | 9.0  | 40.5 | 6.2  | 299          |
| 15-17                                             | 22.8 | 1.3 |   | 9.3  | 3.6 | 1.3 | 4.3 |   | 11.9 | 7.3  | 19.7 | 6.3  | 302          |
| 18-20                                             | 19.5 |     |   | 10.6 | 4.3 | 1.0 | 3.6 |   | 7.3  | 10.6 | 43.2 | 6.6  | 303          |
| 21-23                                             | 29.3 |     |   | 4.9  | 2.0 | 1.3 | 2.6 |   | 2.6  | 7.9  | 40.3 | 5.4  | 305          |
| TOTALS                                            | 30.0 | 1.1 |   | 5.6  | 3.3 | 1.1 | 3.7 |   | 6.7  | 8.7  | 40.7 | 6.0  | 2392         |

STATION NUMBER: 270950 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 74-87  
MONTH: APR

| PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER |      |     |   |     |     |     |     |   |      |      |      |      |              |
|---------------------------------------------------|------|-----|---|-----|-----|-----|-----|---|------|------|------|------|--------------|
| HOURS<br>(LST)                                    | 0    | 1   | 2 | 3   | 4   | 5   | 6   | 7 | 8    | 9    | 10   | MEAN | TOTAL<br>OBS |
| 00-02                                             | 77.4 |     |   | 4.1 | 3.1 | 1.3 | 5.1 |   | 7.5  | 5.8  | 16.7 | 5.4  | 294          |
| 03-05                                             | 16.9 |     |   | 4.4 | 4.1 | 1.4 | 3.1 |   | 5.4  | 7.5  | 17.3 | 5.4  | 295          |
| 06-08                                             | 21.1 | 1.3 |   | 7.9 | 3.4 | 1.0 | 3.1 |   | 10.0 | 9.0  | 42.1 | 6.4  | 290          |
| 09-11                                             | 22.0 | 1.3 |   | 6.6 | 3.5 | 1.7 | 3.1 |   | 10.1 | 11.1 | 41.5 | 6.5  | 287          |
| 12-14                                             | 16.3 | 1.7 |   | 6.6 | 4.1 | 1.0 | 7.1 |   | 12.2 | 8.8  | 42.9 | 6.9  | 294          |
| 15-17                                             | 11.7 | 1.7 |   | 5.6 | 5.8 | 1.7 | 3.9 |   | 11.0 | 9.9  | 41.4 | 7.0  | 292          |
| 18-20                                             | 17.1 |     |   | 9.9 | 3.1 | 2.1 | 6.2 |   | 7.5  | 11.3 | 42.8 | 6.5  | 292          |
| 21-23                                             | 29.6 | 1.3 |   | 7.5 | 5.1 | 1.4 | 4.4 |   | 4.7  | 7.8  | 19.3 | 5.8  | 295          |
| TOTALS                                            | 24.5 | 1.3 |   | 6.6 | 4.3 | 1.3 | 5.1 |   | 6.7  | 8.9  | 40.5 | 6.3  | 2339         |

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/FAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SKY COVER  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275951 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: MAY

| PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER |      |     |   |      |     |     |     |   |      |      |      |      |              |
|---------------------------------------------------|------|-----|---|------|-----|-----|-----|---|------|------|------|------|--------------|
| HOURS  <br>(LST)                                  | 0    | 1   | 2 | 3    | 4   | 5   | 6   | 7 | 8    | 9    | 10   | MEAN | TOTAL<br>OBS |
| 00-02                                             | 44.7 |     |   | 6.9  | 3.6 | 2.3 | 3.6 |   | 7.6  | 4.9  | 26.3 | 4.4  | 304          |
| 03-05                                             | 31.1 | .3  |   | 11.5 | 4.6 | 4.6 | 3.9 |   | 11.1 | 7.2  | 25.6 | 5.1  | 305          |
| 06-08                                             | 32.3 | 1.3 |   | 12.6 | 4.6 | 3.0 | 7.3 |   | 13.9 | 8.9  | 25.8 | 5.7  | 302          |
| 09-11                                             | 31.2 | .7  |   | 14.4 | 7.2 | 3.6 | 5.2 |   | 13.4 | 10.5 | 23.9 | 5.6  | 306          |
| 12-14                                             | 32.3 | .7  |   | 13.9 | 7.6 | 3.0 | 5.6 |   | 20.2 | 8.3  | 25.5 | 6.3  | 302          |
| 15-17                                             | 31.2 | .7  |   | 11.5 | 7.5 | 4.9 | 8.9 |   | 17.0 | 13.1 | 26.2 | 6.5  | 305          |
| 18-20                                             | 34.1 | 1.3 |   | 11.7 | 7.0 | 3.7 | 7.7 |   | 21.4 | 9.1  | 23.5 | 6.2  | 298          |
| 21-23                                             | 36.5 | 1.3 |   | 15.0 | 5.6 | 2.0 | 5.2 |   | 14.4 | 6.2  | 23.9 | 5.2  | 306          |
| TOTALS                                            | 32.9 | .6  |   | 12.2 | 6.0 | 3.4 | 6.3 |   | 14.7 | 8.5  | 25.1 | 5.6  | 2428         |

STATION NUMBER: 275951 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: JUN

| PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER |      |     |   |      |      |     |      |   |      |      |      |      |              |
|---------------------------------------------------|------|-----|---|------|------|-----|------|---|------|------|------|------|--------------|
| HOURS  <br>(LST)                                  | 0    | 1   | 2 | 3    | 4    | 5   | 6    | 7 | 8    | 9    | 10   | MEAN | TOTAL<br>OBS |
| 00-02                                             | 33.5 | 1.3 |   | 13.5 | 7.1  | 2.4 | 6.4  |   | 13.5 | 6.4  | 25.6 | 5.4  | 297          |
| 03-05                                             | 19.1 | .7  |   | 16.4 | 7.2  | 2.7 | 7.5  |   | 17.3 | 4.4  | 29.4 | 5.3  | 293          |
| 06-08                                             | 15.2 | 2.0 |   | 13.2 | 5.1  | 3.7 | 7.5  |   | 12.5 | 8.8  | 26.7 | 6.1  | 296          |
| 09-11                                             | 15.3 | 1.0 |   | 11.6 | 5.8  | 2.4 | 9.5  |   | 14.7 | 9.8  | 27.2 | 6.3  | 294          |
| 12-14                                             | 5.1  | .5  |   | 7.1  | 10.1 | 4.4 | 11.5 |   | 20.6 | 13.5 | 27.4 | 7.1  | 296          |
| 15-17                                             | 6.4  |     |   | 7.1  | 7.1  | 6.5 | 8.5  |   | 24.8 | 13.9 | 25.2 | 7.1  | 294          |
| 18-20                                             | 8.4  | .7  |   | 11.8 | 7.7  | 3.7 | 7.4  |   | 20.9 | 14.5 | 24.9 | 6.5  | 297          |
| 21-23                                             | 12.2 | 1.4 |   | 15.6 | 7.2  | 3.7 | 4.4  |   | 17.6 | 13.9 | 26.1 | 6.2  | 295          |
| TOTALS                                            | 11.1 | .7  |   | 12.2 | 7.8  | 3.7 | 7.4  |   | 17.3 | 10.5 | 26.8 | 6.4  | 2362         |

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SKY COVER  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 27595 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 75-87  
MONTH: JUL

| PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER |      |     |   |      |      |     |      |   |      |      |      |      |           |
|---------------------------------------------------|------|-----|---|------|------|-----|------|---|------|------|------|------|-----------|
| HOURS (UST)                                       | 0    | 1   | 2 | 3    | 4    | 5   | 6    | 7 | 8    | 9    | 10   | MEAN | TOTAL OBS |
| 01-02                                             | 15.7 | .7  |   | 15.4 | 6.2  | 2.0 | 5.6  |   | 10.1 | 7.5  | 16.7 | 4.3  | 306       |
| 03-05                                             | 19.0 | .7  |   | 17.9 | 7.2  | 2.3 | 5.9  |   | 10.7 | 8.5  | 17.9 | 4.7  | 307       |
| 06-08                                             | 12.7 | .7  |   | 14.1 | 4.9  | 3.9 | 8.2  |   | 14.5 | 12.2 | 16.8 | 5.4  | 304       |
| 09-11                                             | 16.5 | 1.9 |   | 12.0 | 6.5  | 3.6 | 9.1  |   | 17.9 | 9.4  | 21.1 | 5.7  | 308       |
| 12-14                                             | 6.3  | 1.3 |   | 9.5  | 5.9  | 6.6 | 10.9 |   | 24.0 | 13.2 | 20.4 | 6.5  | 304       |
| 15-17                                             | 4.5  | 1.7 |   | 9.3  | 11.6 | 6.6 | 14.2 |   | 15.5 | 12.6 | 19.9 | 6.5  | 302       |
| 18-20                                             | 6.9  | 1.3 |   | 18.0 | 4.9  | 3.9 | 8.2  |   | 21.0 | 16.1 | 14.8 | 6.2  | 305       |
| 21-23                                             | 20.1 | 1.9 |   | 19.5 | 8.4  | 4.5 | 7.5  |   | 11.0 | 9.7  | 17.2 | 5.1  | 308       |
| TOTALS                                            | 12.0 | 1.5 |   | 14.5 | 7.5  | 4.4 | 8.6  |   | 16.1 | 11.2 | 15.4 | 5.6  | 2444      |

STATION NUMBER: 27595 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 75-87  
MONTH: AUG

| PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER |      |     |   |      |      |     |      |   |      |      |      |      |           |
|---------------------------------------------------|------|-----|---|------|------|-----|------|---|------|------|------|------|-----------|
| HOURS (UST)                                       | 0    | 1   | 2 | 3    | 4    | 5   | 6    | 7 | 8    | 9    | 10   | MEAN | TOTAL OBS |
| 01-02                                             | 40.4 | .7  |   | 9.2  | 2.3  | 3.0 | 4.9  |   | 5.6  | 7.2  | 21.0 | 4.0  | 305       |
| 03-05                                             | 31.5 | 1.3 |   | 17.9 | 6.6  | 3.0 | 7.0  |   | 7.7  | 5.6  | 23.2 | 4.7  | 302       |
| 06-08                                             | 15.3 | 1.3 |   | 11.6 | 4.7  | 2.0 | 7.0  |   | 15.3 | 9.0  | 25.3 | 5.7  | 301       |
| 09-11                                             | 19.7 | 1.3 |   | 11.1 | 5.2  | 3.3 | 6.2  |   | 10.5 | 13.8 | 20.9 | 6.0  | 305       |
| 12-14                                             | 7.3  | 1.3 |   | 11.3 | 10.3 | 3.6 | 10.6 |   | 14.2 | 17.9 | 14.5 | 6.5  | 302       |
| 15-17                                             | 6.9  | 1.7 |   | 11.6 | 7.6  | 6.6 | 11.2 |   | 20.1 | 13.2 | 21.1 | 6.6  | 303       |
| 18-20                                             | 14.8 | 1.6 |   | 12.1 | 5.6  | 3.9 | 7.2  |   | 15.7 | 14.1 | 22.0 | 6.1  | 305       |
| 21-23                                             | 13.2 | 1.1 |   | 14.8 | 6.9  | 2.2 | 5.7  |   | 10.5 | 8.2  | 23.3 | 5.2  | 305       |
| TOTALS                                            | 12.0 | 1.4 |   | 12.0 | 6.2  | 3.5 | 7.5  |   | 15.7 | 11.1 | 22.7 | 5.6  | 2428      |

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/HAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SKY COVER  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 275451 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 70-71  
MONTH: SEP

| PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER |      |    |   |     |     |     |     |   |      |      |      |      |           |
|---------------------------------------------------|------|----|---|-----|-----|-----|-----|---|------|------|------|------|-----------|
| HOURS (LST)                                       | 0    | 1  | 2 | 3   | 4   | 5   | 6   | 7 | 8    | 9    | 10   | MEAN | TOTAL OBS |
| 00-02                                             | 24.4 | .3 |   | 9.6 | 3.6 | 2.8 | 5.2 |   | 11.5 | 5.2  | 76.9 | 6.0  | 287       |
| 03-05                                             | 31.7 | .3 |   | 7.5 | 1.4 | 1.4 | 3.7 |   | 5.1  | 3.2  | 43.6 | 5.8  | 293       |
| 06-08                                             | 9.6  |    |   | 9.6 | 2.7 | 2.4 | 5.1 |   | 1.7  | 13.0 | 43.6 | 7.5  | 292       |
| 09-11                                             | 5.1  | .3 |   | 6.8 | 4.1 | 2.7 | 4.7 |   | 1.2  | 15.9 | 44.1 | 7.7  | 295       |
| 12-14                                             | 5.9  | .7 |   | 6.9 | 5.9 | 2.1 | 4.5 |   | 1.5  | 16.1 | 41.3 | 7.3  | 286       |
| 15-17                                             | 4.4  | .3 |   | 6.8 | 4.1 | 5.4 | 7.5 |   | 1.2  | 15.3 | 41.2 | 7.5  | 294       |
| 18-20                                             | 5.1  | .4 |   | 6.8 | 5.3 | 2.1 | 6.0 |   | 1.7  | 17.2 | 38.5 | 7.4  | 285       |
| 21-23                                             | 13.1 |    |   | 7.8 | 5.6 | 3.4 | 2.7 |   | 1.7  | 6.5  | 75.1 | 6.2  | 294       |
| TOTALS                                            | 14.4 | .3 |   | 7.6 | 4.1 | 2.4 | 4.9 |   | 12.4 | 12.2 | 40.6 | 7.0  | 2326      |

STATION NUMBER: 275451 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 70-87  
MONTH: OCT

| PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER |      |     |   |     |     |     |     |   |      |      |      |      |           |
|---------------------------------------------------|------|-----|---|-----|-----|-----|-----|---|------|------|------|------|-----------|
| HOURS (LST)                                       | 0    | 1   | 2 | 3   | 4   | 5   | 6   | 7 | 8    | 9    | 10   | MEAN | TOTAL OBS |
| 00-02                                             | 27.0 |     |   | 2.0 | 4.3 | .3  | 3.7 |   | 5.9  | 13.8 | 46.9 | 6.8  | 304       |
| 03-05                                             | 20.5 | .3  |   | 2.3 | 3.6 | 1.0 | 2.6 |   | 5.5  | 10.3 | 48.4 | 6.9  | 306       |
| 06-08                                             | 17.0 | .3  |   | 5.0 | 2.3 | 1.0 | 5.1 |   | 1.0  | 14.4 | 53.8 | 7.7  | 299       |
| 09-11                                             | 13.5 | .3  |   | 6.4 | 1.6 | 1.3 | 2.6 |   | 6.5  | 17.6 | 52.9 | 7.9  | 306       |
| 12-14                                             | 7.7  | .7  |   | 6.4 | 2.0 | 1.0 | 4.7 |   | 11.1 | 17.5 | 47.8 | 7.9  | 297       |
| 15-17                                             | 7.5  | 1.1 |   | 5.6 | 2.3 | 2.0 | 4.7 |   | 11.8 | 20.9 | 44.4 | 7.9  | 306       |
| 18-20                                             | 12.0 | .3  |   | 7.3 | 4.3 | 3.7 | 2.7 |   | 6.6  | 16.6 | 47.5 | 7.5  | 301       |
| 21-23                                             | 17.5 | .3  |   | 4.1 | 3.7 | 1.7 | 3.7 |   | 7.1  | 13.5 | 46.3 | 7.0  | 296       |
| TOTALS                                            | 14.5 | .4  |   | 5.0 | 3.0 | 1.6 | 3.7 |   | 7.9  | 15.6 | 48.4 | 7.5  | 2415      |

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SKY COVER  
FROM HOURLY OBSERVATIONS

STATION NUMBER: 27595 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 77-86  
MONTH: NOV

| PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER |      |    |   |     |     |     |     |   |     |      |      |      |               |
|---------------------------------------------------|------|----|---|-----|-----|-----|-----|---|-----|------|------|------|---------------|
| HOURS<br>(LST)                                    | 0    | 1  | 2 | 3   | 4   | 5   | 6   | 7 | 8   | 9    | 10   | MEAN | TOTAL<br>OBS. |
| 01-02                                             | 10.6 |    |   | 1.1 | 1.4 | .7  | 2.1 |   | 2.1 | 11.1 | 67.5 | 6.2  | 289           |
| 03-04                                             | 10.6 |    |   | 2.4 | 1.4 | .7  | .7  |   | 2.7 | 13.0 | 68.5 | 8.4  | 292           |
| 05-06                                             | 9.3  |    |   | 1.4 | .3  | 1.7 | 1.4 |   | 5.7 | 11.7 | 65.3 | 6.5  | 290           |
| 07-08                                             | 2.1  | .4 |   | 3.9 | 1.4 | 1.4 | 2.8 |   | 7.0 | 14.0 | 68.1 | 9.0  | 285           |
| 09-10                                             | 4.3  | .3 |   | 3.8 | 2.4 | 2.4 | 2.1 |   | 7.3 | 12.4 | 63.9 | 8.5  | 291           |
| 11-12                                             | 5.1  |    |   | 2.7 | 2.7 | .7  | 3.0 |   | 6.9 | 10.8 | 65.2 | 8.5  | 296           |
| 13-14                                             | 3.5  |    |   | 3.8 | 1.7 | 1.0 | 2.4 |   | 7.4 | 10.6 | 68.5 | 8.5  | 292           |
| 15-16                                             | 12.6 |    |   | 2.4 | 3.4 | 1.0 | 2.7 |   | 7.7 | 8.4  | 65.9 | 8.1  | 296           |
| TOTALS                                            | 4.9  | .1 |   | 2.6 | 1.8 | 1.2 | 2.2 |   | 4.6 | 11.8 | 67.0 | 8.5  | 2331          |

STATION NUMBER: 27595 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 77-86  
MONTH: DEC

| PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER |      |    |   |     |     |     |     |   |     |      |      |      |              |
|---------------------------------------------------|------|----|---|-----|-----|-----|-----|---|-----|------|------|------|--------------|
| HOURS<br>(LST)                                    | 0    | 1  | 2 | 3   | 4   | 5   | 6   | 7 | 8   | 9    | 10   | MEAN | TOTAL<br>OBS |
| 01-02                                             | 10.9 | .3 |   | 1.7 | 2.3 | .7  | 2.6 |   | 4.0 | 11.9 | 59.6 | 7.7  | 302          |
| 03-05                                             | 10.5 |    |   | 3.0 | 1.3 | 1.0 | 2.6 |   | 3.5 | 12.9 | 62.0 | 8.0  | 303          |
| 05-08                                             | 12.5 |    |   | 2.1 | 2.4 | .7  | 3.0 |   | 1.3 | 15.5 | 60.6 | 8.0  | 297          |
| 08-11                                             | 9.5  | .4 |   | 4.2 | 2.1 | 1.4 | 1.8 |   | .3  | 13.1 | 62.2 | 8.2  | 283          |
| 11-14                                             | 9.7  |    |   | 7.0 | 3.0 | 1.7 | 4.0 |   | 6.0 | 12.7 | 56.0 | 7.9  | 300          |
| 14-17                                             | 10.3 | .3 |   | 4.1 | 3.6 | .7  | 2.6 |   | 7.0 | 12.7 | 56.9 | 8.0  | 306          |
| 17-20                                             | 13.5 |    |   | 4.3 | 2.6 | 1.3 | 3.3 |   | 1.3 | 11.9 | 60.7 | 7.8  | 303          |
| 20-23                                             | 10.9 |    |   | 3.3 | 2.6 | .3  | .7  |   | 1.0 | 10.4 | 59.8 | 7.5  | 306          |
| TOTALS                                            | 10.3 | .1 |   | 3.6 | 2.5 | 1.0 | 2.6 |   | 4.1 | 12.9 | 59.7 | 7.9  | 2400         |

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/HAC

PERCENTAGE FREQUENCY OF OCCURRENCE OF SKY COVER  
FROM FOURLY OBSERVATIONS

STATION NUMBER: 275950 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 77-87  
MONTH: ALL

| PERCENTAGE FREQUENCY OF TENTHS OF TOTAL SKY COVER |                |      |     |   |      |     |     |     |   |      |      |      |      |              |
|---------------------------------------------------|----------------|------|-----|---|------|-----|-----|-----|---|------|------|------|------|--------------|
|                                                   | HOURS<br>(EST) | 0    | 1   | 2 | 3    | 4   | 5   | 6   | 7 | 8    | 9    | 10   | MEAN | TOTAL<br>OBS |
| JAN                                               | ALL            | 19.4 |     |   | 2.5  | 2.7 | 1.1 | 3.2 |   | 4.3  | 13.2 | 56.6 | 7.6  | 2379         |
| FEB                                               |                | 18.3 | .4  |   | 3.7  | 2.7 | 1.2 | 2.8 |   | 6.2  | 9.9  | 45.1 | 6.3  | 2185         |
| MAR                                               |                | 20.2 | .1  |   | 5.6  | 3.3 | 1.1 | 3.7 |   | 5.7  | 8.7  | 45.7 | 6.0  | 2392         |
| APR                                               |                | 24.5 | .3  |   | 6.6  | 4.0 | 1.3 | 5.1 |   | 7.7  | 8.9  | 40.5 | 6.3  | 2339         |
| MAY                                               |                | 22.9 | .6  |   | 12.2 | 6.0 | 3.4 | 6.3 |   | 14.9 | 8.5  | 25.1 | 5.6  | 2428         |
| JUN                                               |                | 13.1 | .5  |   | 12.0 | 7.6 | 3.7 | 7.9 |   | 17.3 | 10.5 | 26.8 | 6.4  | 2362         |
| JUL                                               |                | 18.0 | 1.5 |   | 14.5 | 7.5 | 4.4 | 8.6 |   | 16.1 | 11.2 | 18.4 | 5.6  | 2444         |
| AUG                                               |                | 20.0 | 1.4 |   | 12.0 | 6.2 | 3.5 | 7.5 |   | 13.7 | 11.1 | 22.7 | 5.6  | 2428         |
| SEP                                               |                | 14.4 | .3  |   | 7.6  | 4.1 | 2.8 | 4.9 |   | 10.9 | 12.2 | 40.6 | 7.0  | 2326         |
| OCT                                               |                | 14.3 | .4  |   | 5.0  | 3.0 | 1.6 | 3.7 |   | 7.4  | 15.6 | 48.4 | 7.5  | 2415         |
| NOV                                               |                | 8.4  | .1  |   | 2.6  | 1.8 | 1.2 | 2.2 |   | 4.3  | 11.8 | 67.0 | 8.5  | 2331         |
| DEC                                               |                | 13.3 | .1  |   | 3.8  | 2.5 | 1.0 | 2.6 |   | 4.1  | 12.9 | 59.7 | 7.9  | 2400         |
| TOTALS                                            |                | 19.4 | .5  |   | 7.4  | 4.3 | 2.2 | 4.9 |   | 5.9  | 11.2 | 41.0 | 6.7  | 28429        |

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#### TEMPERATURE AND RELATIVE HUMIDITY SUMMARIES

##### CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE OF DAILY MAXIMUM (MINIMUM AND MEAN) TEMPERATURES

PERCENTAGE TABULATIONS PRESENTED BY 1-DEGREE FAHRENHEIT INCREMENTS PLUS THE MEAN, STAND. DEVIATIONS AND TOTAL OBSERVATION COUNT.

THE MINIMUM TABLE ALSO INCLUDES A 33 DEGREE FAHRENHEIT VALUE.

SINCE MANY STATIONS/SITES DO NOT HAVE MAXIMUM/MINIMUM THESE TEMPERATURES WERE SELECTED BY SCANNING THE HOURLY OBSERVATIONS FOR THE HIGHEST AND LOWEST VALUES.

STATISTICS DO NOT INCLUDE INCOMPLETE MONTHS.

FOUR OR MORE COMPLETE MONTHS ARE REQUIRED FOR COMPUTING

##### EXTREME MAXIMUM AND MINIMUM VALUES

DATA DERIVED FROM EXTRACTING THE HIGH AND LOW TEMPERATURES FROM THE HOURLY OBSERVATIONS.

PRESENTED ARE THE HIGHEST (LOWEST) TEMPERATURE FOR THE MONTH FOR EACH YEAR.

ALSO PRESENTED ARE STATISTICAL VALUES WITH THE SAME LIMITATIONS MENTIONED ABOVE.

AN ASTERISK INDICATES AN INCOMPLETE MONTH.

##### MEANS AND STANDARD DEVIATIONS FOR WYB BULB (WET BULB AND DEW POINT) TEMPERATURES

DATA DERIVED FROM HOURLY OBSERVATIONS.

DATA PRESENTED BY THE STANDARD 3-HOUR TIME GROUPS BY MONTH, MONTHLY AND ANNUALLY (ALL YEARS COMBINED).

PRESENTED ARE MEANS, STANDARD DEVIATION AND OBSERVATION COUNTS.

##### CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE OF RELATIVE HUMIDITY

DATA DERIVED FROM HOURLY OBSERVATIONS.

SUMMARIZED BY THE STANDARD 3-HOUR TIME GROUPS BY MONTH, MONTHLY AND ANNUALLY (ALL YEARS COMBINED).

PERCENTAGE VALUES PRESENTED IN 10 DEGREE INCREMENTS OF RELATIVE HUMIDITY.

ALSO PRESENTED ARE THE MEAN VALUES AND OBSERVATION COUNTS.

GLOBAL CLIMATOLOGY PROJECT  
USAF/ETAC  
AIR WEATHER SERVICE/MAC

JOY-PULB TEMPERATURES DEG F FROM  
HOURLY OBSERVATIONS

MEANS AND STANDARD DEVIATIONS

STATION NUMBER: 275750 STATION NAME: KAZAN, USSR

PERIOD OF RECORD: 77-87

| HOURS<br>LST | STATS   | JAN    | FEB    | MAR    | APR    | MAY    | JUN    | JUL   | AUG   | SEP   | OCT   | NOV   | DEC    | ANN    |
|--------------|---------|--------|--------|--------|--------|--------|--------|-------|-------|-------|-------|-------|--------|--------|
| 00-02        | MEAN    | 10.4   | 7.6    | 19.2   | 35.4   | 50.2   | 57.5   | 61.1  | 57.8  | 44.9  | 30.7  | 25.8  | 11.0   | 35.9   |
|              | SD      | 14.247 | 11.194 | 11.026 | 8.717  | 8.515  | 8.254  | 5.813 | 5.769 | 5.676 | 7.858 | 9.429 | 13.876 | 20.792 |
|              | TOT OBS | 299    | 273    | 299    | 292    | 304    | 297    | 306   | 305   | 296   | 304   | 288   | 293    | 3552   |
| 03-05        | MEAN    | 10.7   | 7.5    | 18.4   | 34.8   | 48.5   | 55.6   | 59.7  | 56.6  | 44.4  | 26.3  | 26.4  | 16.2   | 35.2   |
|              | SD      | 14.476 | 11.610 | 11.751 | 8.377  | 8.286  | 8.165  | 5.832 | 6.498 | 6.710 | 7.415 | 9.596 | 13.947 | 20.326 |
|              | TOT OBS | 302    | 277    | 303    | 295    | 305    | 292    | 306   | 304   | 290   | 306   | 291   | 302    | 3573   |
| 06-08        | MEAN    | 9.8    | 7.0    | 15.9   | 33.5   | 49.2   | 57.0   | 60.9  | 55.9  | 40.5  | 25.2  | 25.2  | 15.3   | 34.6   |
|              | SD      | 14.430 | 11.259 | 12.236 | 8.478  | 8.417  | 8.134  | 5.429 | 6.506 | 6.714 | 7.577 | 9.674 | 14.471 | 21.091 |
|              | TOT OBS | 292    | 273    | 304    | 299    | 301    | 293    | 302   | 302   | 293   | 297   | 298   | 266    | 3528   |
| 09-11        | MEAN    | 9.0    | 6.4    | 17.6   | 37.5   | 56.4   | 62.8   | 67.6  | 62.6  | 51.6  | 37.2  | 25.9  | 15.6   | 38.8   |
|              | SD      | 14.453 | 12.157 | 11.640 | 9.682  | 10.046 | 9.666  | 6.714 | 7.697 | 7.354 | 7.320 | 9.264 | 14.444 | 23.427 |
|              | TOT OBS | 272    | 281    | 275    | 285    | 306    | 294    | 307   | 303   | 296   | 301   | 283   | 278    | 3450   |
| 12-14        | MEAN    | 11.0   | 10.3   | 23.8   | 42.4   | 61.4   | 66.7   | 71.5  | 67.6  | 50.8  | 40.3  | 27.3  | 16     | 41.7   |
|              | SD      | 13.235 | 9.456  | 10.035 | 11.096 | 11.299 | 10.742 | 7.578 | 8.935 | 9.058 | 8.165 | 8.712 | 13.371 | 24.174 |
|              | TOT OBS | 286    | 274    | 297    | 294    | 300    | 296    | 302   | 301   | 295   | 298   | 290   | 298    | 3531   |
| 15-17        | MEAN    | 10.4   | 14.1   | 26.5   | 43.7   | 63.3   | 68.0   | 72.8  | 69.1  | 57.1  | 41.5  | 27.3  | 16.1   | 42.8   |
|              | SD      | 12.976 | 9.123  | 9.393  | 11.469 | 11.265 | 10.772 | 7.957 | 9.295 | 9.164 | 8.685 | 8.542 | 13.101 | 24.289 |
|              | TOT OBS | 294    | 273    | 296    | 294    | 305    | 290    | 299   | 304   | 294   | 306   | 292   | 362    | 3559   |
| 18-20        | MEAN    | 10.8   | 11.8   | 24.1   | 42.0   | 61.5   | 66.7   | 71.0  | 66.5  | 53.7  | 38.4  | 26.4  | 15.7   | 40.9   |
|              | SD      | 13.632 | 10.044 | 9.583  | 10.712 | 10.891 | 10.127 | 7.612 | 8.689 | 8.376 | 7.702 | 9.078 | 13.035 | 24.093 |
|              | TOT OBS | 293    | 273    | 302    | 292    | 297    | 296    | 305   | 303   | 294   | 300   | 289   | 303    | 3548   |
| 21-23        | MEAN    | 10.5   | 10.8   | 21.7   | 38.1   | 54.3   | 60.7   | 64.7  | 60.5  | 50.2  | 37.2  | 26.1  | 15.0   | 37.6   |
|              | SD      | 13.464 | 10.438 | 10.219 | 9.184  | 9.279  | 8.697  | 6.362 | 7.124 | 6.497 | 7.993 | 9.060 | 13.794 | 21.837 |
|              | TOT OBS | 303    | 274    | 306    | 294    | 305    | 293    | 307   | 303   | 294   | 297   | 297   | 306    | 3579   |
| ALL          | MEAN    | 10.0   | 10.5   | 20.9   | 38.5   | 55.6   | 61.8   | 66.2  | 62.1  | 51.5  | 38.0  | 26.3  | 15.8   | 38.4   |
|              | SD      | 13.979 | 11.009 | 11.305 | 10.416 | 11.302 | 10.457 | 6.314 | 9.174 | 8.471 | 8.094 | 9.181 | 13.707 | 22.739 |
| HOURS        | TOT OBS | 2346   | 2173   | 2382   | 2335   | 2423   | 2351   | 2434  | 2426  | 2373  | 2407  | 2318  | 2383   | 28320  |

## MEANS AND STANDARD DEVIATIONS

SECTION OF RECORD: 77-67

[illegible]

GLOBAL CLIMATOLOGY BRANCH  
USAF/CIAC  
AIR WEATHER SERVICE/MAC

JLW-POINT TEMPERATURES DEG F FROM  
HOURLY OBSERVATIONS

MEANS AND STANDARD DEVIATIONS

STATION NUMBER: 270950 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 77-87

| HOURS<br>LST | STATS   | JAN    | FEB    | MAR    | APR   | MAY    | JUN   | JUL   | AUG   | SEP   | OCT   | NOV    | DEC    | ANN    |
|--------------|---------|--------|--------|--------|-------|--------|-------|-------|-------|-------|-------|--------|--------|--------|
| 00-05        | MEAN    | 7.7    | 6.7    | 15.3   | 24.7  | 40.0   | 49.9  | 55.4  | 52.2  | 44.5  | 33.3  | 23.1   | 12.6   | 31.0   |
|              | SD      | 15.271 | 11.442 | 11.545 | 8.809 | 8.623  | 8.350 | 5.512 | 5.914 | 6.344 | 8.484 | 10.345 | 14.752 | 19.875 |
|              | TOT OPS | 294    | 271    | 298    | 295   | 303    | 296   | 303   | 304   | 282   | 303   | 288    | 295    | 3531   |
| 06-05        | MEAN    | 7.3    | 6.1    | 14.9   | 30.1  | 40.3   | 49.7  | 55.6  | 52.3  | 44.0  | 33.9  | 23.6   | 13.2   | 31.2   |
|              | SD      | 15.471 | 12.222 | 12.471 | 8.819 | 8.575  | 8.356 | 5.505 | 5.845 | 6.243 | 8.375 | 10.475 | 14.970 | 19.921 |
|              | TOT OPS | 294    | 277    | 301    | 292   | 304    | 291   | 306   | 304   | 286   | 306   | 299    | 294    | 3555   |
| 6-05         | MEAN    | 6.5    | 4.4    | 13.0   | 28.8  | 41.0   | 50.3  | 56.0  | 51.8  | 43.8  | 32.5  | 22.5   | 11.9   | 30.4   |
|              | SD      | 15.512 | 12.996 | 12.693 | 8.707 | 8.347  | 8.559 | 5.176 | 5.867 | 6.255 | 8.305 | 10.512 | 15.328 | 20.494 |
|              | TOT OPS | 291    | 270    | 304    | 298   | 301    | 292   | 298   | 303   | 287   | 293   | 287    | 295    | 3508   |
| 09-11        | MEAN    | 6.7    | 5.2    | 14.0   | 30.5  | 40.2   | 50.0  | 56.6  | 52.9  | 43.4  | 33.0  | 23.1   | 12.5   | 31.7   |
|              | SD      | 15.713 | 12.349 | 12.096 | 8.776 | 9.842  | 9.411 | 5.742 | 6.178 | 6.561 | 8.342 | 10.161 | 15.415 | 20.473 |
|              | TOT OPS | 271    | 249    | 271    | 282   | 306    | 293   | 307   | 301   | 295   | 300   | 242    | 275    | 3431   |
| 12-14        | MEAN    | 7.5    | 7.7    | 19.2   | 31.2  | 39.3   | 49.4  | 55.3  | 51.4  | 44.5  | 34.2  | 23.6   | 12.9   | 31.5   |
|              | SD      | 14.277 | 10.836 | 10.788 | 8.829 | 10.388 | 9.554 | 6.871 | 7.302 | 7.272 | 8.468 | 9.844  | 14.594 | 19.294 |
|              | TOT OPS | 294    | 273    | 295    | 294   | 299    | 293   | 300   | 300   | 284   | 293   | 287    | 294    | 3506   |
| 15-17        | MEAN    | 6.4    | 3.8    | 13.5   | 30.9  | 38.7   | 49.1  | 55.1  | 50.7  | 44.3  | 33.9  | 23.6   | 12.4   | 31.4   |
|              | SD      | 14.176 | 10.174 | 10.426 | 9.000 | 10.270 | 9.715 | 6.813 | 6.974 | 7.179 | 8.675 | 9.746  | 14.262 | 18.874 |
|              | TOT OPS | 291    | 273    | 296    | 293   | 303    | 288   | 296   | 304   | 287   | 303   | 291    | 300    | 3536   |
| 18-21        | MEAN    | 7.0    | 7.1    | 18.2   | 31.9  | 40.3   | 49.9  | 55.7  | 51.8  | 45.2  | 33.4  | 23.3   | 12.2   | 31.5   |
|              | SD      | 14.726 | 10.904 | 10.602 | 9.293 | 10.300 | 9.397 | 6.750 | 6.953 | 6.890 | 8.479 | 9.898  | 14.055 | 19.696 |
|              | TOT OPS | 296    | 276    | 299    | 291   | 296    | 292   | 304   | 302   | 294   | 297   | 289    | 301    | 3527   |
| 21-23        | MEAN    | 7.1    | 6.3    | 17.0   | 31.1  | 40.8   | 50.7  | 56.1  | 52.4  | 44.5  | 33.2  | 23.3   | 11.8   | 31.3   |
|              | SD      | 14.274 | 11.736 | 11.171 | 9.001 | 6.973  | 8.687 | 5.810 | 5.947 | 6.392 | 8.500 | 10.110 | 14.812 | 19.966 |
|              | TOT OPS | 290    | 274    | 301    | 297   | 303    | 293   | 306   | 302   | 287   | 285   | 295    | 300    | 3547   |
| ALL          | MEAN    | 7.1    | 6.6    | 15.3   | 30.5  | 40.1   | 49.9  | 55.7  | 51.9  | 44.6  | 33.5  | 23.3   | 12.4   | 31.3   |
| HOURS        | SD      | 15.271 | 11.643 | 11.697 | 8.962 | 9.460  | 9.016 | 6.267 | 6.417 | 6.872 | 8.383 | 10.128 | 14.758 | 19.829 |
|              | TOT OPS | 2944   | 2145   | 2363   | 2317  | 2415   | 2334  | 2400  | 2421  | 2296  | 2390  | 2308   | 2359   | 28141  |

GLOBAL CLIMATOLOGY BRANCH  
USAF/ETAC  
AIR WEATHER SERVICE/MAL

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE  
FROM HOURLY OBSERVATIONS

RELATIVE HUMIDITY

STATION NUMBER: 275957 STATION NAME: KAZAN, USSR

PERIOD OF RECORD: 79-87  
MONTH: JAN

| MONTH | HOURS<br>(LST) | PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN |       |       |       |       |       |      |      |      |            | MEAN<br>[RELATIVE<br>HUMIDITY] | TOTAL |
|-------|----------------|--------------------------------------------------------|-------|-------|-------|-------|-------|------|------|------|------------|--------------------------------|-------|
|       |                | 10%                                                    | 20%   | 30%   | 40%   | 50%   | 60%   | 70%  | 80%  | 90%  | NUM<br>OBS |                                |       |
| JAN   | 00-02          | 100.0                                                  | 100.0 | 100.0 | 100.0 | 99.7  | 98.7  | 93.6 | 75.5 | 40.3 | 85.8       | 298                            |       |
|       | 03-05          | 100.0                                                  | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 95.0 | 76.5 | 43.3 | 86.5       | 298                            |       |
|       | 06-08          | 100.0                                                  | 100.0 | 100.0 | 100.0 | 99.7  | 99.3  | 96.2 | 74.1 | 41.9 | 86.5       | 291                            |       |
|       | 09-11          | 100.0                                                  | 100.0 | 100.0 | 99.6  | 99.6  | 98.9  | 94.9 | 74.1 | 47.3 | 86.1       | 271                            |       |
|       | 12-14          | 100.0                                                  | 100.0 | 100.0 | 100.0 | 100.0 | 99.3  | 93.5 | 71.8 | 37.4 | 85.4       | 294                            |       |
|       | 15-17          | 100.0                                                  | 100.0 | 100.0 | 100.0 | 100.0 | 98.7  | 90.0 | 69.3 | 33.3 | 84.2       | 300                            |       |
|       | 18-20          | 100.0                                                  | 100.0 | 100.0 | 99.7  | 99.7  | 99.3  | 93.6 | 68.9 | 39.9 | 85.7       | 291                            |       |
|       | 21-23          | 100.0                                                  | 100.0 | 100.0 | 100.0 | 99.7  | 98.3  | 93.7 | 74.3 | 34.3 | 85.5       | 303                            |       |
|       | TOTALS         | 100.0                                                  | 100.0 | 100.0 | 99.9  | 99.8  | 99.1  | 93.8 | 73.1 | 40.0 | 85.6       | 2345                           |       |

GLOBAL CLIMATOLOGY BRANCH  
USAF/CLAC  
AIR WEATHER SERVICE/MAC

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE  
FROM HOURLY OBSERVATIONS

RELATIVE HUMIDITY

STATION NUMBER: 27090 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: FEB

| MONTH | HOURS<br>(LST) | PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN |       |       |       |       |       |      |      |      | MEAN                 | TOTAL |
|-------|----------------|--------------------------------------------------------|-------|-------|-------|-------|-------|------|------|------|----------------------|-------|
|       |                | 10%                                                    | 20%   | 30%   | 40%   | 50%   | 60%   | 70%  | 80%  | 90%  | RELATIVE<br>HUMIDITY | NUM   |
| FEB   | 00-05          | 100.0                                                  | 100.0 | 100.0 | 100.0 | 100.0 | 98.9  | 92.3 | 73.1 | 37.2 | 85.4                 | 271   |
|       | 06-10          | 100.0                                                  | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 93.9 | 77.3 | 44.8 | 86.4                 | 277   |
|       | 11-15          | 100.0                                                  | 100.0 | 100.0 | 100.0 | 100.0 | 99.6  | 90.3 | 77.6 | 40.3 | 86.6                 | 272   |
|       | 16-20          | 100.0                                                  | 100.0 | 100.0 | 99.6  | 99.6  | 95.8  | 95.0 | 81.1 | 44.6 | 86.8                 | 245   |
|       | 21-23          | 100.0                                                  | 100.0 | 100.0 | 99.6  | 99.6  | 98.0  | 86.4 | 58.6 | 34.4 | 82.1                 | 272   |
|       | 24-27          | 100.0                                                  | 100.0 | 100.0 | 99.3  | 97.8  | 95.6  | 76.9 | 49.1 | 17.6 | 79.2                 | 273   |
|       | 28-29          | 100.0                                                  | 100.0 | 100.0 | 100.0 | 99.6  | 98.2  | 82.6 | 59.1 | 20.4 | 81.6                 | 276   |
|       | 30-01          | 100.0                                                  | 100.0 | 100.0 | 99.6  | 98.5  | 97.4  | 69.4 | 67.2 | 34.7 | 83.4                 | 274   |
|       | TOTAL          | 100.0                                                  | 100.0 | 100.0 | 99.8  | 99.4  | 98.3  | 89.1 | 67.9 | 37.4 | 83.9                 | 2165  |

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE  
FROM HOURLY OBSERVATIONS

RELATIVE HUMIDITY

STATION NUMBER: 270950 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: MAR

| MONTH  | HOURS<br>(LST) | PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN |       |       |       |       |      |      |      |      | MEAN<br>RELATIVE<br>HUMIDITY | TOTAL<br>NUM<br>OBS |
|--------|----------------|--------------------------------------------------------|-------|-------|-------|-------|------|------|------|------|------------------------------|---------------------|
|        |                | 10%                                                    | 20%   | 30%   | 40%   | 50%   | 60%  | 70%  | 80%  | 90%  |                              |                     |
| MAR    | 00-07          | 100.0                                                  | 100.0 | 100.0 | 100.0 | 100.0 | 99.0 | 88.9 | 65.1 | 36.2 | 54.8                         | 298                 |
|        | 08-05          | 100.0                                                  | 100.0 | 100.0 | 100.0 | 100.0 | 99.0 | 94.4 | 73.6 | 47.5 | 57.1                         | 301                 |
|        | 06-05          | 100.0                                                  | 100.0 | 100.0 | 100.0 | 99.3  | 99.3 | 95.7 | 82.1 | 57.2 | 68.2                         | 302                 |
|        | 09-11          | 100.0                                                  | 100.0 | 100.0 | 100.0 | 100.0 | 98.2 | 92.6 | 71.2 | 48.0 | 55.7                         | 271                 |
|        | 12-14          | 100.0                                                  | 100.0 | 100.0 | 100.0 | 99.0  | 94.2 | 79.7 | 49.0 | 20.3 | 79.6                         | 295                 |
|        | 15-17          | 100.0                                                  | 99.7  | 99.7  | 99.3  | 95.9  | 67.9 | 66.2 | 39.9 | 15.0 | 75.9                         | 296                 |
|        | 18-20          | 100.0                                                  | 100.0 | 100.0 | 99.7  | 97.0  | 94.3 | 79.6 | 45.8 | 20.7 | 79.0                         | 295                 |
|        | 21-23          | 100.0                                                  | 100.0 | 100.0 | 100.0 | 99.7  | 97.3 | 84.4 | 57.1 | 29.2 | 62.5                         | 301                 |
| TOTALS |                | 100.0                                                  | 100.0 | 100.0 | 99.9  | 98.9  | 96.1 | 85.2 | 60.5 | 32.7 | 52.9                         | 2362                |

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MFC

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE  
FROM HOURLY OBSERVATIONS

RELATIVE HUMIDITY

STATION NUMBER: 27595 STATION NAME: KAZAN, USSR

PERIOD OF RECORD: 78-87  
MONTH: APR

| MONTH | HOURS<br>(UTC) | PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN |       |       |       |      |      |      |      |      |                        | MEAN | TOTAL |
|-------|----------------|--------------------------------------------------------|-------|-------|-------|------|------|------|------|------|------------------------|------|-------|
|       |                | 10%                                                    | 20%   | 30%   | 40%   | 50%  | 60%  | 70%  | 80%  | 90%  | [RELATIVE<br>HUMIDITY] | NUM  |       |
| APR   | 00-02          | 100.0                                                  | 100.0 | 100.0 | 99.7  | 98.3 | 92.8 | 76.6 | 55.2 | 29.3 | 60.7                   | 291  |       |
|       | 03-05          | 100.0                                                  | 100.0 | 100.0 | 100.0 | 99.7 | 97.5 | 83.7 | 62.0 | 34.4 | 83.3                   | 292  |       |
|       | 06-08          | 100.0                                                  | 100.0 | 100.0 | 100.0 | 99.7 | 96.2 | 84.4 | 63.9 | 35.4 | 83.9                   | 298  |       |
|       | 09-11          | 100.0                                                  | 100.0 | 100.0 | 99.9  | 92.9 | 80.9 | 63.1 | 46.5 | 23.4 | 76.3                   | 282  |       |
|       | 12-14          | 100.0                                                  | 99.7  | 97.3  | 91.8  | 80.6 | 61.9 | 46.6 | 30.6 | 17.7 | 67.5                   | 294  |       |
|       | 15-17          | 100.0                                                  | 100.0 | 93.5  | 80.1  | 74.1 | 54.6 | 36.5 | 23.9 | 17.0 | 64.1                   | 293  |       |
|       | 18-20          | 100.0                                                  | 99.7  | 94.3  | 97.6  | 83.5 | 68.0 | 48.1 | 29.2 | 15.8 | 69.6                   | 291  |       |
|       | 21-23          | 100.0                                                  | 100.0 | 100.0 | 95.7  | 96.2 | 83.6 | 67.6 | 44.7 | 22.3 | 77.1                   | 267  |       |
|       | TOTALS         | 100.0                                                  | 99.9  | 98.6  | 95.5  | 90.6 | 79.5 | 63.3 | 44.6 | 23.4 | 75.3                   | 2317 |       |

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE  
FROM HOURLY OBSERVATIONS

RELATIVE HUMIDITY

STATION NUMBER: 275951 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 78-87  
MONTH: MAY

| MONTH | HOURS<br>(LST) | PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN |       |       |       |      |      |      |      |      | MEAN<br>RELATIVE<br>HUMIDITY | TOTAL<br>NUM<br>OBS |
|-------|----------------|--------------------------------------------------------|-------|-------|-------|------|------|------|------|------|------------------------------|---------------------|
|       |                | 10%                                                    | 20%   | 30%   | 40%   | 50%  | 60%  | 70%  | 80%  | 90%  |                              |                     |
| MAY   | 10-02          | 100.0                                                  | 100.0 | 100.0 | 97.7  | 87.5 | 68.3 | 46.9 | 25.1 | 11.6 | 69.7                         | 303                 |
|       | 3-05           | 100.0                                                  | 100.0 | 100.0 | 99.3  | 96.4 | 80.6 | 62.5 | 37.5 | 17.2 | 74.4                         | 304                 |
|       | 6-08           | 100.0                                                  | 100.0 | 100.0 | 100.0 | 97.0 | 61.7 | 59.8 | 33.9 | 11.2 | 74.1                         | 301                 |
|       | 9-11           | 100.0                                                  | 100.0 | 98.0  | 79.1  | 58.5 | 40.9 | 23.0 | 11.4 | 4.6  | 57.0                         | 300                 |
|       | 12-14          | 100.0                                                  | 97.7  | 79.6  | 55.5  | 36.1 | 24.4 | 15.1 | 9.7  | 4.3  | 47.8                         | 299                 |
|       | 15-17          | 100.0                                                  | 95.7  | 75.6  | 45.5  | 28.1 | 18.3 | 9.9  | 6.6  | 2.6  | 43.9                         | 303                 |
|       | 18-20          | 100.0                                                  | 79.7  | 64.8  | 61.1  | 38.5 | 25.3 | 15.9 | 7.4  | 2.4  | 48.9                         | 296                 |
|       | 21-03          | 100.0                                                  | 100.0 | 99.3  | 92.4  | 73.6 | 48.5 | 33.0 | 18.0 | 6.5  | 62.5                         | 303                 |
|       | TOTALS         | 100.0                                                  | 94.8  | 92.2  | 79.8  | 64.5 | 43.6 | 33.3 | 18.6 | 6.5  | 59.8                         | 2415                |

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MNL

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE  
FROM HOURLY OBSERVATIONS

RELATIVE HUMIDITY

STATION NUMBER: 275957 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 72-87  
MONTH: JUN

| MONTH | HOURS<br>(LETT) | PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN |       |       |       |      |      |      |      |      |      | MEAN<br>RELATIVE<br>HUMIDITY | TOTAL<br>NUM<br>OBS |
|-------|-----------------|--------------------------------------------------------|-------|-------|-------|------|------|------|------|------|------|------------------------------|---------------------|
|       |                 | 10%                                                    | 20%   | 30%   | 40%   | 50%  | 60%  | 70%  | 80%  | 90%  |      |                              |                     |
| JUN   | 00-02           | 100.0                                                  | 100.0 | 100.0 | 100.0 | 95.9 | 85.5 | 70.9 | 50.0 | 31.6 | 79.2 | 290                          |                     |
|       | 03-05           | 100.0                                                  | 100.0 | 100.0 | 99.7  | 98.6 | 91.4 | 79.4 | 58.1 | 38.8 | 51.5 | 292                          |                     |
|       | 06-08           | 100.0                                                  | 100.0 | 100.0 | 99.7  | 98.3 | 91.4 | 75.3 | 52.4 | 33.4 | 79.2 | 292                          |                     |
|       | 09-11           | 100.0                                                  | 100.0 | 99.6  | 94.2  | 78.5 | 60.1 | 36.2 | 18.9 | 7.2  | 55.2 | 293                          |                     |
|       | 12-14           | 100.0                                                  | 99.7  | 94.5  | 74.5  | 57.0 | 37.9 | 24.2 | 13.7 | 5.8  | 56.7 | 293                          |                     |
|       | 15-17           | 100.0                                                  | 99.7  | 90.6  | 71.2  | 52.8 | 37.2 | 20.1 | 10.4 | 5.4  | 54.2 | 288                          |                     |
|       | 18-20           | 100.0                                                  | 100.0 | 94.5  | 75.4  | 61.3 | 42.5 | 26.7 | 15.1 | 4.5  | 57.7 | 292                          |                     |
|       | 21-23           | 100.0                                                  | 100.0 | 99.3  | 97.6  | 87.4 | 71.7 | 54.9 | 33.4 | 11.6 | 71.3 | 293                          |                     |
|       | TOTALS          | 100.0                                                  | 99.9  | 97.2  | 86.9  | 78.7 | 64.7 | 48.5 | 31.4 | 12.4 | 63.0 | 2338                         |                     |

GLOBAL CLIMATOLOGY BRANCH  
NSAFETAC  
AIR WEATHER SERVICE/MAC

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE  
FROM HOURLY OBSERVATIONS

RELATIVE HUMIDITY

STATION NUMBER: 27000 STATION NAME: KAZAL USK

PERIOD OF RECORD: 70-87  
MONTH: JUL

| MONTH | HOURS<br>(LST) | PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN |       |       |       |       |      |      |      |      | MEAN                   | TOTAL      |
|-------|----------------|--------------------------------------------------------|-------|-------|-------|-------|------|------|------|------|------------------------|------------|
|       |                | 1%                                                     | 5%    | 30%   | 40%   | 50%   | 60%  | 70%  | 80%  | 90%  | [RELATIVE<br>HUMIDITY] | NUM<br>OBS |
| JUL   | 1-24           | 100.0                                                  | 100.0 | 96.3  | 99.7  | 99.0  | 95.7 | 84.9 | 62.0 | 3.8  | 82.2                   | 332        |
|       | 3-24           | 100.0                                                  | 100.0 | 100.0 | 99.7  | 99.0  | 97.7 | 92.8 | 76.8 | 42.0 | 86.6                   | 300        |
|       | 6-24           | 100.0                                                  | 100.0 | 100.0 | 100.0 | 100.0 | 97.3 | 89.2 | 69.5 | 29.5 | 84.3                   | 296        |
|       | 9-24           | 100.0                                                  | 100.0 | 100.0 | 99.7  | 89.3  | 74.9 | 45.3 | 22.8 | 5.6  | 89.2                   | 307        |
|       | 12-24          | 100.0                                                  | 99.7  | 97.7  | 85.0  | 67.7  | 40.0 | 24.0 | 11.0 | 2.7  | 58.6                   | 300        |
|       | 15-24          | 100.0                                                  | 85.7  | 9.6   | 81.1  | 60.8  | 35.8 | 18.0 | 8.8  | 0.7  | 55.0                   | 296        |
|       | 18-24          | 100.0                                                  | 100.0 | 97.7  | 86.8  | 70.4  | 47.7 | 28.6 | 14.1 | 8.3  | 60.8                   | 304        |
|       | 21-24          | 100.0                                                  | 100.0 | 99.3  | 99.0  | 95.4  | 83.3 | 65.7 | 37.3 | 11.4 | 74.8                   | 300        |
|       | TOTALS         | 100.0                                                  | 99.9  | 98.8  | 94.1  | 85.2  | 71.6 | 56.2 | 37.8 | 14.4 | 71.6                   | 2420       |

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE  
FROM FOURLY OBSERVATIONS

RELATIVE HUMIDITY

STATION NUMBER: 279907 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 79-87  
MONTH: AUG

| MONTH | FOURS<br>(LST) | PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN |       |       |       |      |      |      |      |      |      | MEAN<br>RELATIVE<br>HUMIDITY | TOTAL<br>NUM<br>OBS |
|-------|----------------|--------------------------------------------------------|-------|-------|-------|------|------|------|------|------|------|------------------------------|---------------------|
|       |                | 10%                                                    | 20%   | 30%   | 40%   | 50%  | 60%  | 70%  | 80%  | 90%  |      |                              |                     |
| AUG   | 10-00          | 100.0                                                  | 100.0 | 100.0 | 99.7  | 98.0 | 92.4 | 66.2 | 59.5 | 29.7 | 42.5 | 304                          |                     |
|       | 10-05          | 100.0                                                  | 100.0 | 100.0 | 100.0 | 99.4 | 96.1 | 91.8 | 75.1 | 42.4 | 46.2 | 304                          |                     |
|       | 10-10          | 100.0                                                  | 100.0 | 100.0 | 100.0 | 99.0 | 97.4 | 94.7 | 77.2 | 39.7 | 36.6 | 303                          |                     |
|       | 10-15          | 100.0                                                  | 100.0 | 100.0 | 97.7  | 93.7 | 78.1 | 59.5 | 27.2 | 7.0  | 71.2 | 301                          |                     |
|       | 10-20          | 100.0                                                  | 95.0  | 87.3  | 84.3  | 64.3 | 45.0 | 22.3 | 8.7  | 0.3  | 53.4 | 300                          |                     |
|       | 10-25          | 100.0                                                  | 100.0 | 93.4  | 77.0  | 51.6 | 34.2 | 2.1  | 11.4 | 2.6  | 54.5 | 304                          |                     |
|       | 10-30          | 100.0                                                  | 100.0 | 87.4  | 90.1  | 67.2 | 48.0 | 2.1  | 14.6 | 5.2  | 60.6 | 302                          |                     |
|       | 11-05          | 100.0                                                  | 100.0 | 99.7  | 99.7  | 95.4 | 86.8 | 66.2 | 39.2 | 14.5 | 76.0 | 303                          |                     |
|       | TOTALS         | 100.0                                                  | 100.0 | 98.5  | 94.1  | 83.5 | 72.3 | 58.6 | 39.3 | 18.2 | 72.1 | 2421                         |                     |

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AIR WEATHER SERVICE/ETAC

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE  
FROM HOURLY OBSERVATIONS

RELATIVE HUMIDITY

STATION NUMBER: 27900 STATION NAME: KAZAN, USSR

PERIOD OF RECORD: 75-87  
MONTH: SEP

| MONTH  | HOURS<br>(LST) | PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN |       |       |       |      |      |      |      |      | MEAN<br>(RELATIVE<br>HUMIDITY) | TOTAL<br>NUM<br>OBS |
|--------|----------------|--------------------------------------------------------|-------|-------|-------|------|------|------|------|------|--------------------------------|---------------------|
|        |                | 1%                                                     | 5%    | 10%   | 40%   | 50%  | 60%  | 70%  | 80%  | 90%  |                                |                     |
| SEP    | 1-24           | 100.0                                                  | 100.0 | 100.0 | 99.7  | 97.9 | 96.3 | 90.3 | 71.7 | 40.1 | 85.4                           | 282                 |
|        | 5-12           | 100.0                                                  | 100.0 | 100.0 | 100.0 | 99.7 | 99.3 | 94.6 | 81.6 | 57.7 | 88.4                           | 286                 |
|        | 13-21          | 100.0                                                  | 100.0 | 100.0 | 100.0 | 99.7 | 99.7 | 96.0 | 86.1 | 66.2 | 89.7                           | 287                 |
|        | 19-22          | 100.0                                                  | 100.0 | 100.0 | 99.7  | 98.3 | 91.5 | 79.7 | 62.9 | 45.4 | 80.4                           | 295                 |
|        | 14-16          | 100.0                                                  | 100.0 | 98.6  | 94.4  | 84.5 | 63.7 | 45.4 | 27.1 | 17.0 | 68.0                           | 284                 |
|        | 15-17          | 100.0                                                  | 98.7  | 97.6  | 90.3  | 76.8 | 59.5 | 39.4 | 22.5 | 9.7  | 65.3                           | 289                 |
|        | 18-20          | 100.0                                                  | 100.0 | 99.3  | 97.5  | 92.6 | 81.7 | 64.6 | 39.7 | 19.1 | 74.6                           | 284                 |
|        | 21-27          | 100.0                                                  | 100.0 | 100.0 | 99.7  | 98.3 | 91.7 | 80.1 | 61.3 | 36.8 | 81.7                           | 287                 |
| TOTALS |                | 100.0                                                  | 100.0 | 99.4  | 97.7  | 93.6 | 85.3 | 73.8 | 55.1 | 30.1 | 70.1                           | 2296                |

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE  
FROM FOURLY OBSERVATIONS

RELATIVE HUMIDITY

STATION NUMBER: 27060 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 79-87  
MONTH: OCT

| MONTH | FOURTH<br>(LST) | PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN |       |       |       |       |      |      |      |      |                        | MEAN       | TOTAL |
|-------|-----------------|--------------------------------------------------------|-------|-------|-------|-------|------|------|------|------|------------------------|------------|-------|
|       |                 | 10%                                                    | 20%   | 30%   | 40%   | 50%   | 60%  | 70%  | 80%  | 90%  | (RELATIVE<br>HUMIDITY) | NUM<br>OBS |       |
| OCT   | 00-02           | 100.0                                                  | 100.0 | 100.0 | 100.0 | 100.0 | 98.7 | 95.4 | 84.2 | 44.5 | 97.9                   | 303        |       |
|       | 03-05           | 100.0                                                  | 100.0 | 100.0 | 100.0 | 100.0 | 98.7 | 96.1 | 85.9 | 57.8 | 89.3                   | 306        |       |
|       | 06-08           | 100.0                                                  | 100.0 | 99.7  | 99.7  | 99.7  | 99.0 | 96.6 | 89.1 | 58.0 | 90.2                   | 292        |       |
|       | 09-11           | 100.0                                                  | 100.0 | 100.0 | 100.0 | 100.0 | 99.7 | 94.0 | 75.0 | 40.0 | 86.8                   | 300        |       |
|       | 12-14           | 100.0                                                  | 100.0 | 100.0 | 100.0 | 98.0  | 88.4 | 68.3 | 47.1 | 24.0 | 78.2                   | 292        |       |
|       | 15-17           | 100.0                                                  | 100.0 | 100.0 | 99.0  | 95.0  | 79.5 | 64.0 | 42.2 | 19.1 | 75.4                   | 303        |       |
|       | 18-20           | 100.0                                                  | 100.0 | 100.0 | 99.7  | 98.7  | 95.5 | 85.9 | 63.3 | 29.6 | 82.8                   | 297        |       |
|       | 21-23           | 100.0                                                  | 100.0 | 100.0 | 100.0 | 99.0  | 98.0 | 92.9 | 76.9 | 35.9 | 85.7                   | 295        |       |
|       | TOTALS          | 100.0                                                  | 100.0 | 100.0 | 99.8  | 98.8  | 94.7 | 86.7 | 70.5 | 38.9 | 84.5                   | 2390       |       |

JOINT CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE  
FROM HOURLY OBSERVATIONS

RELATIVE HUMIDITY

STATION NUMBER: 270900 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 77-86  
MONTH: NOV

| MONTH  | HOURS<br>(LST) | PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN |       |       |       |       |       |      |      |      |                   | MEAN | TOTAL |
|--------|----------------|--------------------------------------------------------|-------|-------|-------|-------|-------|------|------|------|-------------------|------|-------|
|        |                | 10%                                                    | 20%   | 30%   | 40%   | 50%   | 60%   | 70%  | 80%  | 90%  | RELATIVE HUMIDITY | NUM  | OBS   |
| NOV    | 10-10          | 100.0                                                  | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 97.0 | 85.9 | 57.2 | 89.6              | 286  |       |
|        | 13-15          | 100.0                                                  | 100.0 | 100.0 | 100.0 | 100.0 | 99.3  | 97.6 | 86.2 | 59.1 | 99.6              | 289  |       |
|        | 16-18          | 100.0                                                  | 100.0 | 100.0 | 100.0 | 99.7  | 97.3  | 96.9 | 85.4 | 53.3 | 89.6              | 287  |       |
|        | 19-21          | 100.0                                                  | 100.0 | 100.0 | 97.6  | 99.6  | 99.3  | 97.5 | 86.0 | 56.4 | 99.3              | 282  |       |
|        | 22-24          | 100.0                                                  | 100.0 | 100.0 | 97.7  | 99.3  | 98.3  | 92.7 | 75.2 | 44.3 | 86.0              | 267  |       |
|        | 15-17          | 100.0                                                  | 100.0 | 100.0 | 100.0 | 99.7  | 98.5  | 91.1 | 74.6 | 38.8 | 86.0              | 291  |       |
|        | 18-20          | 100.0                                                  | 100.0 | 100.0 | 100.0 | 100.0 | 99.7  | 97.2 | 79.9 | 47.6 | 88.1              | 289  |       |
|        | 21-23          | 100.0                                                  | 100.0 | 100.0 | 100.0 | 100.0 | 99.7  | 97.3 | 85.4 | 57.6 | 99.1              | 295  |       |
| TOTALS |                | 100.0                                                  | 100.0 | 100.0 | 99.9  | 99.8  | 99.2  | 95.9 | 82.4 | 51.2 | 88.4              | 2336 |       |

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE  
FROM HOURLY OBSERVATIONS

RELATIVE HUMIDITY

STATION NUMBER: 275950 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 77-86  
MONTH: DEC

| MONTH  | HOURS<br>(LST) | PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN |       |       |       |       |      |      |      |      | MEAN<br>[RELATIVE<br>HUMIDITY] | TOTAL |
|--------|----------------|--------------------------------------------------------|-------|-------|-------|-------|------|------|------|------|--------------------------------|-------|
|        |                |                                                        |       |       |       |       |      |      |      |      |                                | NUM   |
|        |                | 1%                                                     | 5%    | 10%   | 40%   | 50%   | 60%  | 70%  | 80%  | 90%  |                                | OBS   |
| DEC    | 00-02          | 100.0                                                  | 100.0 | 100.0 | 100.0 | 100.0 | 98.6 | 94.2 | 78.0 | 47.5 | 87.3                           | 295   |
|        | 03-05          | 100.0                                                  | 100.0 | 100.0 | 100.0 | 100.0 | 99.0 | 95.3 | 80.9 | 50.8 | 87.6                           | 299   |
|        | 06-08          | 100.0                                                  | 100.0 | 99.7  | 99.0  | 99.0  | 97.6 | 92.2 | 76.6 | 47.5 | 86.6                           | 295   |
|        | 09-11          | 100.0                                                  | 100.0 | 100.0 | 99.6  | 99.3  | 98.9 | 93.6 | 79.3 | 50.5 | 87.2                           | 275   |
|        | 12-14          | 100.0                                                  | 100.0 | 100.0 | 99.7  | 99.7  | 99.3 | 93.6 | 70.7 | 40.5 | 85.5                           | 294   |
|        | 15-17          | 100.0                                                  | 100.0 | 100.0 | 100.0 | 99.7  | 99.0 | 91.0 | 71.0 | 41.7 | 85.4                           | 300   |
|        | 18-20          | 100.0                                                  | 100.0 | 100.0 | 100.0 | 99.7  | 99.0 | 91.4 | 74.8 | 47.2 | 86.0                           | 301   |
|        | 21-23          | 100.0                                                  | 100.0 | 100.0 | 100.0 | 100.0 | 98.7 | 94.3 | 77.3 | 49.0 | 86.9                           | 300   |
| TOTALS |                | 100.0                                                  | 100.0 | 100.0 | 99.8  | 99.7  | 98.9 | 93.2 | 76.2 | 46.3 | 86.6                           | 2355  |

GLOBAL CLIMATOLOGY BRANCH  
USAFETAC  
AIR WEATHER SERVICE/MAC

CUMULATIVE PERCENTAGE FREQUENCY OF OCCURRENCE  
FROM HOURLY OBSERVATIONS

RELATIVE HUMIDITY

STATION NUMBER: 275950 STATION NAME: KAZAN USSR

PERIOD OF RECORD: 77-P7  
MONTH: ALL

| MONTH  | HOURS<br>(LST) | PERCENTAGE FREQUENCY OF RELATIVE HUMIDITY GREATER THAN |       |       |      |      |      |      |      |      | MEAN                   | TOTAL      |
|--------|----------------|--------------------------------------------------------|-------|-------|------|------|------|------|------|------|------------------------|------------|
|        |                | 10%                                                    | 20%   | 30%   | 40%  | 50%  | 60%  | 70%  | 80%  | 90%  | [RELATIVE<br>HUMIDITY] | NUM<br>OBS |
| JAN    | ALL            | 100.0                                                  | 100.0 | 100.0 | 99.9 | 99.8 | 99.1 | 93.9 | 73.1 | 49.0 | 85.6                   | 2349       |
| FEB    |                | 100.0                                                  | 100.0 | 100.0 | 99.9 | 99.4 | 98.3 | 89.1 | 67.2 | 27.8 | 83.9                   | 2165       |
| MAR    |                | 100.0                                                  | 100.0 | 100.0 | 99.9 | 98.9 | 96.1 | 85.2 | 60.5 | 30.7 | 82.9                   | 2363       |
| APR    |                | 100.0                                                  | 99.9  | 98.6  | 96.5 | 90.6 | 79.5 | 63.3 | 44.6 | 23.4 | 75.3                   | 2317       |
| MAY    |                | 100.0                                                  | 98.7  | 92.2  | 79.6 | 64.5 | 48.6 | 33.3 | 19.6 | 6.9  | 59.8                   | 2415       |
| JUN    |                | 100.0                                                  | 97.9  | 97.2  | 89.9 | 78.7 | 64.7 | 48.5 | 31.4 | 17.4 | 68.0                   | 2338       |
| JUL    |                | 100.0                                                  | 99.9  | 98.8  | 94.1 | 85.2 | 71.6 | 56.2 | 37.8 | 14.6 | 71.6                   | 2420       |
| AUG    |                | 100.0                                                  | 100.0 | 98.5  | 94.1 | 83.5 | 72.3 | 58.6 | 39.3 | 16.2 | 72.1                   | 2421       |
| SEP    |                | 100.0                                                  | 100.0 | 99.4  | 97.7 | 93.5 | 85.3 | 73.8 | 55.1 | 29.6 | 79.1                   | 2294       |
| OCT    |                | 100.0                                                  | 100.0 | 100.0 | 99.9 | 98.8 | 94.7 | 86.7 | 70.5 | 50.9 | 84.5                   | 2390       |
| NOV    |                | 100.0                                                  | 100.0 | 100.0 | 99.9 | 99.8 | 99.2 | 95.9 | 92.4 | 81.2 | 88.4                   | 2308       |
| DEC    |                | 100.0                                                  | 100.0 | 100.0 | 99.8 | 99.7 | 98.8 | 93.2 | 76.2 | 47.7 | 86.6                   | 2359       |
| TOTALS |                | 100.0                                                  | 99.9  | 98.7  | 95.9 | 91.0 | 84.0 | 73.1 | 54.6 | 29.0 | 78.2                   | 28141      |

|          |           |          |          |          |
|----------|-----------|----------|----------|----------|
| PPPPPPPP | AAAAAA    | RRRRRRRQ | TTTTTTTT | FFFFFFFF |
| PPPPPPPP | AAAAAAA   | RRRRRRRR | TTTTTTTT | FFFFFFFF |
| PP PP    | AA AA     | RR RR    | TT       | FF       |
| PP PP    | AA AA     | RR RR    | TT       | FF       |
| PPPPPPPP | AA AA     | RRRRRRRR | TT       | FFFFF    |
| PPPPPPPP | AAAAAAAAA | RRRRRRRR | TT       | FFFFF    |
| PP       | AAAAAAA   | RR RR    | TT       | FF       |
| PP       | AA AA     | RR RR    | TT       | FF       |
| PP       | AA AA     | RR RR    | TT       | FF       |
| PP       | AA AA     | RR RR    | TT       | FF       |

DATA NOT AVAILABLE

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